Towards a Systematic Review of the Water Services Authority Model

Report to the
Water Research Commission

by

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EXECUTIVE SUMMARY

In South Africa, water services are the responsibility of local government, who are supported by their provincial government and national government. Initially, the responsibility lay with district municipalities, but in 2001 was allocated between local and district municipalities. The local government which has the authority function (known as the water services authority), may then follow a process, known as a section 78, to allocate the responsibility to another entity, or perform the provider function themselves (known as the water services provider). Collectively, this is known as the WSA model. This paper reviews the water services authority model and provides recommendation for its improvement.

The failings of water services in South Africa have been well documented, with the Department of Water and Sanitation themselves stating in the Water and Sanitation Master Plan that the country is “facing significant challenges” and that the “insufficient water infrastructure maintenance and investment, recurrent droughts driven by climatic variation, inequities in access to water and sanitation, deteriorating water quality, and a lack of skilled water engineers" are causing a water crisis in the country. The authors calculate that only 54% of households have access to water services that will meet the Sustainable Development Goals standard in 2030, and approximately 51% of the households have access to sanitation services that will meet the Sustainable Development Goals. Other challenges faced include the demand for water exceeding current sustainable supply, 56% of wastewater treatment works and 44% of water treatment works in poor or critical condition, a severely financially constrained sector with pervasive under-recovery of costs through low tariffs, and intermittent water supply affecting approximately 25% of the households in the country, while 35% of potable water is lost through leakage resulting in R10 billion per year of lost revenue.

An analysis of the root causes of the dysfunction, informed by the teams’ collective experience and a series of case studies, show that many challenges faced by WSAs are not necessarily water services challenges, but are municipal-wide or government-wide challenges that are manifesting in water services. Provincial and national government are obligated to support municipalities in the delivery of services, but lack of capacity at provincial and national level has eroded their ability to provide the required support. When the state of a municipality becomes so poor that intervention is required, national and provincial government have, in most cases, been unable to provide the required support. National government also is responsible for setting out the legislation to which municipalities must adhere when managing their affairs and delivering infrastructure services. Some regulations are onerous for municipalities to adhere to; in particular, supply chain management regulations and regulations on the use of public-private partnerships to deliver municipal services.

While this research indicates that the primary concern is not with institutional structures, it is evident that the two-tier system of local government should also be reviewed, specifically dealing with district municipalities. Within the current structure, however, municipalities themselves are primarily responsible for poor service delivery. Instability at the political leadership or senior staff levels often causes there to be service delivery issues. Political interference in technocratic decision-making processes also leads to poor service delivery, and municipal councils are often not held to account for the poor quality of services provided. The organisational functionality of municipalities is often quite poor, and infrastructure and financial management systems are often not in place to manage the municipality correctly. Decision making regarding service levels is also often made without considering the life cycle costs of the infrastructure.

Municipalities that are not performing well financially are typically struggling as a result of systemic municipal-wide governance and organisational issues, rather than inherent financial issues specific to water service provision. Notwithstanding the relevance and influence of municipal financial distress, financial management deserves discrete attention given the effect it has on water services. 75% of municipalities are unable to produce credible financial statements, indicating that they are not able to manage their financial situation effectively, and the fiscal transfer system is not responsive to local contextual challenges faced by

municipalities (such as topography, scheme size, population densities, the need for infrequent but large-scale capital expenditure, etc.).

Municipal residents are the receivers of the services provided and are at times responsible for part of the service delivery challenges faced by municipalities. Non-payment for services rendered (often because of a lack of political will to encourage payment for services and impose credit control measures if required) is pervasive across water services authorities, and is contributing to many municipalities not being able to pay their debts to other entities of government and private sector contractors. There are other concerns with civil society where there is involvement in 'construction cartels,' patronage and vandalism which reduce the ability of the municipality to deliver adequate services.

Courts have intervened in the functioning of the WSA model and have made unilateral decisions regarding service delivery mechanisms and the allocation of the WSP role. These decisions should be tested by the Constitutional Court.

In order to deal with the numerous challenges with municipal governance, and the WSA model, the research has come up with six recommendations to assist in resolving these issues:

WSA model

The WSA model is not inherently flawed, but a review of the process for designating water services authorities is overdue. The criteria used in this process should be rational, objective, and transparent and should not consider the financial viability of municipalities as a criterion as this is a fiscal framework matter.

WSA performance and support

The two-tier system of local government requires a review, as this has created ambiguity in the delivery of many services, water services included. The intergovernmental transfer system also requires a review. This could include mandatory reporting on sectoral allocation of the equitable share grant, incentive-based grants, and capacity building grants. These grants could be tied to technical and financial management support.

Currently, water services authorities are not sufficiently supported by provincial and national government. A proactive, differentiated approach to supporting municipalities should be adopted by national and provincial government.

Interventions

The interventions conducted to date have not adequately diagnosed the causal factors leading to service delivery failures, and the sectoral remedies imposed have not adequately dealt with the root, causal factors contributing to municipal failure. The provincial authorities, as well as the administrators themselves, should be improved and there should be greater political support for the intervention.

There is need to review the intervention legislation, including from a harmonisation perspective. Provisions in the Water Services Act (section 63) in relation to the Constitution (section 139) and Chapter 13 of the Local Government: Municipal Financial Management Act (the MFMA) regulate interventions in terms of section 139(4) and (5). In the current legislation, there are neither constitutional nor legislative measures available for the Minister to take over the functions of municipalities that are unable to fulfil their obligations. The emergent question is, within the current legislative prescripts, what can be done pragmatically, and what are the options to realise intervention outcomes more successfully rather than have disparate, parallel processes. What can be done to oblige (and give) the Minister of Water and Sanitation more powers to intervene directly?

Section 139 interventions are complex and multifaceted processes, and in dealing with crisis in WSAs, the relationships between political leadership at national and provincial level is critical, as is *harmonisation* between CoGTA, provinces, National Treasury, and the sector department, DWS. While it would be sensible

to review the Water Services Act, harmonisation has more to do with political and technical *cooperation* between COGTA, provinces, DWS and WSAs and the commitment of resources to support.

Emphasise the importance of an intervention plan where failure is dire, and intervention becomes the only mechanism. An intervention plan in response to a section 139 intervention decision should be designed to address the issues that led to the decision. The intervention plan should clearly separate, define and articulate the leadership, governance, and financial aspects from the technical, implementation aspects. What this means is a clear distinction in the form of the arrangement and the roles and responsibilities to manage and mitigate inefficiencies, confusion, and delays.

Careful consideration should be given to the option of water boards as implementing agents for section 63 of the Water Services Act interventions. Evidence has shown that water boards are not always the right option, and it would be important to review and consider the role that water boards are *usefully* able to play, and whether or not water boards are the most suitable (fit-for-purpose) to support the decisions taken in a section 63 intervention – perhaps in the immediate to short-term.

The interventions of courts have not always been made in such a way that clarifies the legislation and may have made delivering water services more challenging than before. The Constitutional Court should make a ruling on the decisions made.

An early warning system for water services failure should be implemented; provincial authorities should not wait for abject failure of service delivery before providing support to municipalities.

Water services authority / water services provider issues

If the water services authority model is to be reviewed, the flexibility of the model should be retained, and a single solution should not be prescribed for all contexts. The use of internal, independent municipal entities, acting as water service entities, could be used to shield the delivery of services from governance and finance issues within a municipality. Proper water services authority regulation is required in this case, and therefore will likely only work in larger municipalities.

External water services providers

The section 78 process to determine the appropriate service delivery mechanism needs to be reviewed by national government to become more substantive and meaningful. There is also a compete dearth of oversight of the municipal section 78 processes by national government. There should also be a concerted effort by National Treasury to refine the supply chain management legislation, and the public-private partnerships legislation. Municipalities should also be supported during the design, procurement, and ongoing management of public-private partnerships.

While an important consideration in the water services provision value chain, there is limited evidence to support the argument that water boards or district municipalities can inherently provide water services more efficiently than local municipalities. Water boards and districts, should, therefore, be seen as a short-term measure, and not as the panacea, for water services delivery.

Water services provider licencing

Finally, there is a need for an economic regulator for water services. This regulator can regulate water tariffs, outline service delivery standards for water services authorities, and hold them accountable to these. The economic regulator could issue the licenses necessary for water services providers to deliver the services, and possibly oversee section 78 processes.

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ACRONYMS & ABBREVIATIONS

A category municipality	Metropolitan Municipalities
B1 category municipality	Municipalities with a large economic core (secondary cities)
B2 category municipality	Municipalities with a large town as its economic core
B3 category municipality	Municipalities with several small economic cores
B4 category municipality	Predominately rural municipalities without an economic core
C1 category municipality	Non-WSA District Municipalities
C2 category municipality	WSA District Municipalities
CRC	Current replacement cost
DCoG	Department of Co-operative Governance
DDM	District Development Model
DPLG	Department of Provincial and Local Government
DWS	Department of Water and Sanitation
FSM	Faecal Sludge Management
IRIS	Integrated Regulatory Information System
JMP	Joint Monitoring Programme
KCR	Kgetleng Concern Residents
KLM	Kgetlengrivier Municipality
LOS	Level of Service
MEC	Member of the Executive Council
PPP	Public-private partnership
SAICE	South African Institution of Civil Engineers
SALGA	South African Local Government Association
SCM	Supply chain management
SDG	Sustainable Development Goal
StatsSA	Statistics South Africa
UN	United Nations
WISA	Water Institute of Southern Africa
WRC	Water Research Commission
WSA	Water Services Authority
WSP	Water Service Provider

GLOSSARY

basic water services	A basic water supply service and/or a basic sanitation service.
economic costs	The direct (financial) and indirect costs associated with the provision of the service. Indirect costs include environmental and other externalities and economic opportunity costs.
financial costs	All financial costs directly associated with the provision of the service including (but not limited to) operating costs, maintenance costs, depreciation costs, finance costs and necessary and prudent financial provisions (to account for bad debt, for example).
formal connection	A connection approved by a Water Services Provider including any connection which is formally registered with a water services provider.
integrated development plan (IDP)	A municipal plan as defined in the Municipal Systems Act.
local government equitable share	A constitutionally protected unconditional grant from national government to local government to support the operating costs of basic services.
local water services provider	A water services provider providing water services to only one water services authority.
municipal infrastructure grant	A conditional grant from national government to support investment in basic municipal infrastructure.
sanitation services	The collection, removal, disposal or treatment of human excreta and domestic wastewater, and the collection, treatment and disposal of industrial wastewater. This includes all the organisational arrangements necessary to ensure the provision of sanitation services including, amongst others, appropriate health, hygiene and sanitation related awareness, the measurement of the quantity and quality of discharges where appropriate, and the associated billing, collection of revenue and consumer care. Water services authorities have a right but not an obligation to accept industrial wastewater from industries within their area of jurisdiction.
service delivery agreement	A contract between a water services authority and a water services provider for the delivery of municipal services, or between water services providers.
wastewater	Used water resulting from the use of water for domestic or other purposes which may include or exclude human excreta.
water board	A water services provider which is an organ of state and whose primary function is that of bulk water services provider.
water resource	Any water resource as defined in the National Water Act.
water sector	Includes both water resources and water services.
water services authority	Any municipality that has the executive authority to provide water services within its area of jurisdiction in terms of the Municipal Structures Act or the ministerial authorisations made in terms of this Act. The Water Services Authority (WSA) is responsible for the overall management and regulation of water and sanitation services within a specific geographic area. The WSA is responsible for setting policies, planning and coordinating the provision of water and sanitation services,

	regulating and monitoring the activities of Water Services Providers (WSPs), and ensuring that water resources are managed sustainably. The WSA is also responsible for promoting universal access to water and sanitation services and ensuring that these services are affordable and of sufficient quality for all customers.
water services development plan	A plan for water and sanitation services in terms of the Water Services Act.
water services provider	A Water Services Provider (WSP) is responsible for providing water supply and sanitation services within a specific geographic area. This can include municipalities, water boards, and private companies. The WSP is responsible for ensuring that water is supplied in sufficient quantities and quality, managing and maintaining the infrastructure, billing customers, and using revenue to maintain and upgrade the infrastructure. The provision of water and sanitation services is governed by the National Water Act and the Water Services Act, which provide a legal framework for management and delivery of these services.

CHAPTER 1: INTRODUCTION

In April 2022, PDG, in association with Jim Gibson, Kathy Eales and Dave Still of Partners in Development, were appointed by the Water Research Commission (WRC) to undertake the research project titled: "Towards a systematic review of the Water Services Authority model". This Review Report represents the final deliverable for the project and incorporates the substance of the literature review and case study research, consultations with key stakeholders, the workshop held at the Water Institute of Southern Africa (WISA) Conference (28 September 2022), and the Stakeholder Workshop (10 November 2022).

1.1 PROJECT BACKGROUND

The foundations for the current model of delivering water services has been shaped primarily through three seminal pieces of legislation, the Constitution of the Republic of South Africa (1996), the Water Services Act (1997, as amended), and the National Water Act (1998, as amended). These Acts place responsibility for water services largely in the local government sphere, through what is referred to in the Terms of Reference (ToR) as the 'Water Services Authority (WSA) model.' Combined with the suite of legislation (Municipal Structures Act 117 of 1998 and the Municipal Systems Act 32 of 2000) pertaining to wall-to-wall local government, these Acts have meant that the authority (in this case, meaning the overall responsibility) has been with local government for over 20-years, with little change. These Water Services Authorities (WSAs) have the responsibility to determine the mechanism used to deliver the water services in their areas of jurisdiction, with the entity delivering this service being termed the Water Service Provider (WSP). In most cases, these entities are one and the same, with the WSA retaining the WSP function. A process outlined in section 78 of the Municipal Systems Act (2000, as amended) must be followed to determine the most appropriate mechanism to deliver municipal services.

There has been extensive research on the provision of the water service in South Africa, but in many cases, this has conflated the issues associated with water provision (through the WSP) and the overall authority for the provision of water (the WSA). There are important distinctions between these two functions, but in practice the distinction has become blurred such that the clear objectives of the Water Services Act are not achieved. In some cases, municipalities have struggled to perform a regulatory function where they are also the provider, and in other cases, municipalities have struggled to manage external WSPs. Municipalities face several parallel and contributory challenges around financial sustainability, financial management, leadership and governance, and technical capacity that contribute to difficulties in fulfilling the WSA function, including the allocations of Free Basic Water (FBW). In many instances this has led to regulatory interventions in terms of section 139 of the Constitution, section 63 of the Water Services Act or directives from the Department of Water and Sanitation (DWS).

It is important to correctly identify the causes of, and potential remedies to, the current water services challenges, which is the rationale behind the need for this piece of research. While the performance of WSAs is a function of many factors, the scope of the project is focussed firmly on the institutional model. In other words, it will focus on how the institutional legal framework for WSAs has impacted on the services provided, and conversely, how external factors affecting local government impact on the ability of WSAs to perform their functions. We therefore will exclude more general discussions on the state of local government or the functioning of the water sector in general.

The research is utilization focussed, i.e. it has been designed and conducted in a way that aimed to enhance the utility of the analytical findings and of the process itself, to inform decisions and improve performance. The project team will be engaging with, and seeking to inform, some of the newer debates emerging in the sector

with the leadership changes in DWS, and since the initial proposal was submitted. These debates (insofar as they relate to the WSA model) include:

- Proposed amendments to section 78 of the Municipal Systems Act
- Proposed amendments to section 84 and 85 of the Municipal Structures Act
- Proposed amendments to the Water Services Act
- The way in which the District Development Model (DDM) supports WSAs, including the rationalisation of WSAs to align to the DDM
- The role of water boards in water services provision, particularly the retail function
- The DWS Water Services Improvement Plan

1.2 RESEARCH AIM

The aim of the research is to inform current debates and the legislation that governs the WSA/WSP model, and to provide an empirical basis for policy reform.

1.3 RESEARCH OBJECTIVES

The output of this research is intended to inform policy and decision making. There are clear and evident challenges to water supply and the provision of adequate sanitation, as outlined in the National Water and Sanitation Master Plan (2018), and extensive research into specific WSAs, but there has been little research that has drawn together these disparate pieces of research into a consolidated review of the performance of the WSA model. This research piece proposes to consolidate this research, augmented by research in specific WSAs, that represent particular challenges identified. The service delivery, regulatory, institutional, and financial implications of the current WSA model will be described, and the policy levers that can be drawn on will be described.

1.4 RESEARCH QUESTIONS

1. What are the challenges that the WSA model has encountered?
2. What changes to the WSA model, including regulatory interventions, have been made to address service delivery challenges and how effective have these been?
3. What are the levers that policymakers can use when influencing the performance of the water service?
4. What should a further review of the WSA model focus on?

CHAPTER 2: METHODOLOGY

2.1 LITERATURE REVIEW

The research team has collated, evaluated, and synthesised previous research that has been conducted on WSAs in South Africa. The focus was on the WSAs' increased infrastructure provision and access to the water and sanitation service, operational performance (in relation to the provision of an uninterrupted supply of clean water), governance, and financial performance.

2.2 DATA ANALYSIS

The research team analysed WSA performance data that is available at the national level; primarily from Statistics South Africa (StatsSA), the Department of Water and Sanitation's Integrated Regulatory Information System (IRIS) database (into which the Blue and Green Drop Data is reported), the National Integrated Water Information System, National Treasury's outcome reporting, and other meta-reviews of WSA performance.

2.3 CASE STUDIES

The main component of the research was an in-depth analysis of specific WSAs that present learnings that could be used to inform policy going forward. These case studies were based on the project team's experience in these WSAs, and interviews conducted with individuals in the WSAs, or those involved in interventions in the WSAs. The selected case studies comprise:

- City of Mbombela Local Municipality;
- Joe Gqabi District Municipality;
- Kgetlengrivier Local Municipality;
- Emfuleni Local Municipality; and
- Ngaka Modiri Molema District Municipality.

These case studies investigated the following subjects:

- Service provision performance of the WSA, over time;
- Governance history;
- Financial performance;
- Any intergovernmental support or interventions applied;
- A comparison of relative performance against similar and different WSAs; and
- A review of the WSP mechanism applied and any challenges experienced.

In addition to the above in-depth case studies, two other examples of municipalities that have experienced exceptional or poor performance, provincial government interventions, or are otherwise noteworthy to illustrate elements of the WSA model, were covered in less detail, Makana Local Municipality and Chris Hani District Municipality.

2.4 STAKEHOLDER INTERVIEWS

Interviews were conducted with national level stakeholders (DWS, South African Local Government Association (SALGA), National Treasury and the Department of Cooperative Governance and Traditional Affairs (COGTA)) to discuss the WSA model; the rationalisation and optimization of the number of WSAs (and/or WSPs) in the country to achieve economies of scale and make the best use of scarce skills; the

potential advantages, disadvantages, and unintended consequences of reducing the number of WSAs; the allocation of WSA status between DMs and LMs; performance standards for WSAs; the achievement of better outcomes if water and sanitation services were managed by well-governed, professionally managed utilities; and the role of the respective sector stakeholder, i.e. where and in what way can they have the greatest influence and impact, as well as recent developments in the sector. The interview with National Treasury explored the sufficiency of financial support; the extent to which the intergovernmental fiscal arrangements incentivise municipalities to continually improve their performance; and considerations in the design of the fiscal framework to ensure financial viability, while encouraging good financial performance and service delivery.

Table 1 below lists the interviews held with respective stakeholders. The list of interviews is included as an Annexure.

Table 1: Stakeholder interviews

Stakeholder	***No of interviews***	***Directorate***
DWS	1 interview with 3 participants	Specialist Unit Water Services Strategy, Policy and Evaluation
SALGA	1	Water and Sanitation within Trading Services, Municipal Finance, Fiscal Policy and Economic Growth
CoGTA	1	Intergovernmental Coordination in the Office of the Deputy Director-General
National Treasury	1 interview with 3 participants	Directorate: LG Fiscal Framework; Division: Water Services Assets and Liabilities; Cities Support Programme (CSP): Intergovernmental Relations, including water resilience in the 8 metros

2.5 WORKSHOP

A set of preliminary findings and recommendations from the literature review, case studies and interviews were presented to two stakeholder workshops. The first was at the WISA Conference (28 September 2022), and the second was a sector Stakeholder Workshop (10 November 2022) that involved a targeted audience, including the DWS, SALGA, and sector experts. Notably absent were the Department of Cooperative Governance and National Treasury. Participants' recommendations for further data sources, recommendations on the findings of the study, and inputs into the need for future research, were considered and have been included in this report.

CHAPTER 3: FINDINGS

3.1 THE WSA MODEL: WHAT IS IT?

The WSA model is the legal framework and regulatory system that assigns the roles and responsibilities for water services to the relevant institutions and governs how these services are meant to be provided.

Part B of Schedule 4 of the **Constitution of the Republic of South Africa** allocates "[w]ater and sanitation services limited to potable water supply systems and domestic wastewater and sewage disposal systems" to local government. The **Municipal Structures Act** (amended 2000) allocates 'potable water supply systems' and 'domestic wastewater and sewage disposal systems' to district municipalities. Water supply and sanitation (sewerage) services are grouped together in the **Water Services Act** under the term "water services". The municipality which is given the statutory authority to provide water services is known as the WSA (although this term is undefined in the Water Services Act). A WSP is separated out from the WSA in the Water Services Act and is defined as "any person who provides water services to consumers or to another water services institution. but does not include a water services intermediary". In most cases in South Africa the authority is also the provider (WSA is the WSP), but the provider function can be delegated to another organisation, including another municipality.

The Municipal Structures Act designates district municipalities as the WSAs. This remains in place in 21 districts, referred to as C2 districts, or WSA districts (note that some B1 municipalities within C2 districts are WSAs). Outside of these C2 districts, local municipalities have been authorised to be the WSA, as per clause 84 (3) of the Structures Act. Figure 1 below shows the distribution of WSAs by municipal type. Notable is the density of C2 district WSAs in the Eastern Cape and KwaZulu-Natal which is associated with the history of 'homelands' located in these areas where communal land tenure and low levels of service predominate.

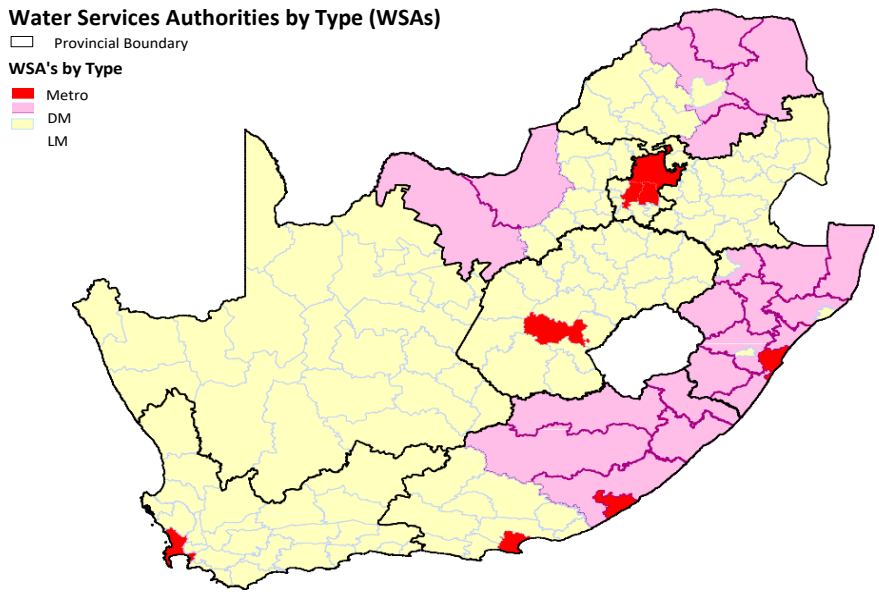

Figure 1: The distribution of WSA's by type of local government (Source: DWS, 2015)

A summary is given below in Table 2 of the criteria, indicators and scoring system applied by the former Department of Provincial and Local Government (DPLG, now COGTA) in 2001 to allocate the WSA between local and district municipalities. The 2001 DPLG report (unpublished) provides a full description of data, all of which is available and is quantifiable.

Table 2: Original authorisation criteria for WSA allocation

	Criteria	Indicator	Average sores		Sensitivity	Explanation
			B	C		
1	Existing infrastructure:	Number of water schemes crossing B boundaries within the district	0	12	Low	Low sensitivity to weighting as there are not that many situations where more than one scheme crosses boundaries.
2.1	Flexibility of water service provider arrangements:	Number of Bs within the C.	37	100	High	Reasonably high sensitivity as most Cs have 4 or more Bs within them.
2.2	Benefit of capacity redistribution	Percentage of households not provided with piped water service in the district.	0	34	Moderate	Moderate sensitivity as service levels are fairly high in many municipalities.
3.1	Benefit of WSA capacity at district-	Proportion of staff within the C that will be transferred from the B to the C	84	100	Low	Low sensitivity as most local authorities have relatively little capacity to transfer. This criterion impacts mainly on large municipalities.
3.2	Benefit of WSA capacity at B	Proportion of households served with piped water within the area of the B.	73	0	High	Fairly high impact as many local authorities have relatively high service levels currently.
4	**Financial redistribution potential**	Extent of variability of high to low-income households in each B, weighted for size of Cs.	0	25	Low	Fairly low sensitivity as most districts do not have a high variability in relative income levels.
5	Accountability	Number of Bs: The greater the number of Bs in the C the greater the loss of accountability	100	37	High	Fairly high sensitivity as most districts have 4 or more Bs within them.
6	Avoided transfer costs	Net number of water services staff that will have to be transferred between Bs and Cs (to the power of 0.7 to allow for economies of scale).	5	1	Low	Low sensitivity as most Bs have small numbers of staff. This criterion has the greatest impact on large Bs.

	Criteria	Indicator	Average sores		Sensitivity	Explanation
			B	C		
7.	Impact on local government capacity	Location of services allocated by MECs: roads and refuse removal	100	0	High	High sensitivity as no 'high value' MEC functions have been allocated to districts. Therefore, Bs strongly favoured.
8.	Alignment of powers and functions with revenue sources	Location of services allocated by MECs: roads and refuse removal	100	0	High	As with criterion 7, high sensitivity as no 'high value' MEC functions have been allocated to districts. Therefore, Bs strongly favoured.
9	Financial sustainability – Ability to borrow	Ratio of high to low-income households in B when compared to C	11	6	Low	Low sensitivity as most municipalities do not have the capacity to borrow. However, impact on large Bs is substantial.

The regionalisation that occurred through the redefinition of municipal boundaries and allocation of the water service to local government between 1996 and 2000, changed the number of municipal water operators from more than 800 to less than 280.

The authors surmise through this study as well as other own research work that the definition of water services is clear, the designation of WSAs was applied through a sound process, the water services function is reasonably understood and both capital and operating transfers from the national fiscus are well targeted to the WSA. This targeting approach does not consider where the WSP is located, and there are cases where the district municipality appoints a local municipality or external entity to be the WSP. There is one case where a group of local municipalities as the WSAs have appointed a district municipality, West Coast District Municipality, to be the WSP. The funding allocated towards the WSA does not always follow this delegation, and often the contracts and service level agreements are not clear on this issue.

Water Boards provide bulk water services to WSAs in some parts of the country. Although not always the case, most water boards purchase or abstract untreated raw water and treat this water to potable standards. This water is then sold to the 'retail' water service provider, typically a municipality. There may be direct provision of water from the Water Board to rural domestic or large industrial customers, although this is generally limited.

The DWS has undertaken studies to assess the capacity of WSAs and investigate potential amendments to existing configuration of WSAs. This is being addressed by the Department of Co-operative Governance (DCoG) through drafting of amendments to the Municipal Structures Act (Eberhard, 2022). At the stage of writing this research paper, progress on this is uncertain.

The WSA has several different types of entities that it can contract with to provide municipal services. These are called 'mechanisms' and are described in the Municipal Systems Act. Section 76 of the Municipal Systems Act outlines the mechanisms that a municipality can use for the provision of services. The Council of a municipality may choose to use an internal mechanism, which may be:

- A department or other administrative unit within its administration; or
- A business unit devised by the municipality provided it operates within the municipality's administration and under the control of the council in accordance with operational and performance criteria determined by the council; or

- Any other component of the administration.

The municipality may also enter into a service delivery agreement with an external mechanism. The list of available external mechanisms is shown in Figure 2 below.

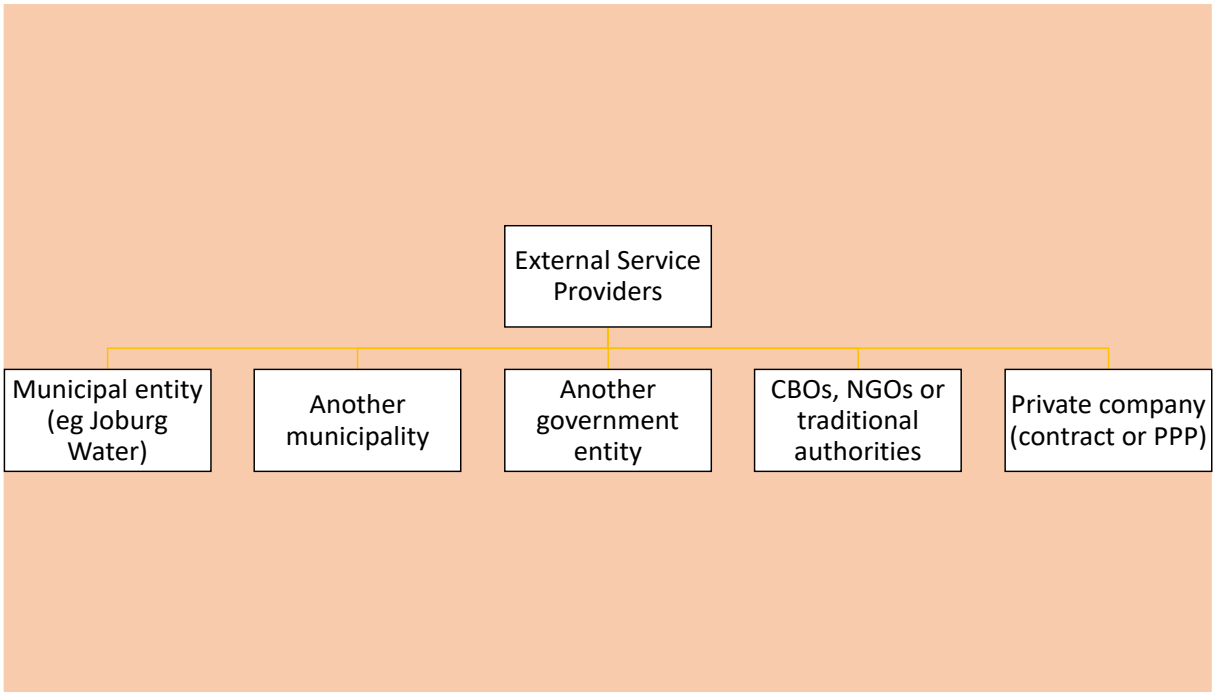

Figure 2: External mechanisms available for service provision[1]

The process to determine the appropriate service delivery mechanism is outlined in section 78 of the Municipal Systems Act, with the triggers for a section 78 study described in section 77.

South Africa has a well-developed fiscal framework that allocates money from nationally collected tax revenue to WSAs based on a set of formulae. The Free Basic Water policy of national government states that poor households (earning less than two old-age pensions, approximately R3 500 per month) are entitled to 50 litres per person per day for a four-person household: equating to 6 kilolitres per household per month. The Equitable Share grant is intended to cover the cost of this to the WSP through a transfer to the WSA. Using the principle of decentralisation, it is intended that the WSA allocate this to the WSP, should these entities be different to one another. Capital funding for water services is allocated from the national fiscus through conditional allocations towards approved projects. These projects are typically designed to service social, rather than economic, customers. Capital projects that serve economic interests (such as high-income residential customers or commercial/industrial users) are typically designed to be funded from municipal reserves, accrued through surpluses on their tariffs, or loans.

[1] The inclusion of a municipal entity, which is an internal mechanism, but could be considered an external provider, if it provides services to entities or individuals outside of its local government jurisdiction. In such a case it would be acting as an external provider. Whether a municipal entity is considered an internal or external provider depends on the specific context and nature of the services it provides.

3.2 THE INTERVENTION FRAMEWORK: WHAT IS SUPPOSED TO HAPPEN WHEN THINGS GO WRONG?

This section outlines the provisions in law for monitoring, strengthening, and intervening in local government provision of water services. Some of these mechanisms apply generally to local government, while others are specific to the water sector.

The Constitution of the Republic of South Africa
Section 154 of the Constitution outlines the responsibility of national and provincial spheres of government to 'support and strengthen the capacity of municipalities to manage their own affairs, to exercise their powers and to perform their functions'.

Section 139 of the Constitution outlines the provincial interventions in local government. If a municipality cannot or does not fulfil an executive obligation, in terms of the Constitution or legislation, the relevant provincial executive *may* intervene by taking any appropriate steps to ensure fulfilment of that obligation. The interventions that provincial government may perform are listed in section 139 (1) and include:

a) Issuing a directive to the Municipal Council, describing the extent of the failure to fulfil its obligations, and stating any steps required to meet its obligations;

b) Assuming responsibility for the relevant obligation in that municipality to the extent necessary to;

   I. maintain essential national standards or meet established minimum standards for the rendering of a service;

   II. prevent that Municipal Council from taking unreasonable action; or

   III. maintain economic unity.

c) dissolving the Municipal Council and appointing an administrator until a newly elected Municipal Council has been declared elected.

A provincial authority may also intervene in a municipality if the municipality is unable to approve a budget or any revenue-raising measures necessary to give effect to the budget (section 139 [4]). To do so the provincial authority may:

- appointing an administrator until a newly elected Municipal Council has been declared elected; and
- Approve a temporary budget or revenue-raising measures to provide for the continued functioning of the municipality.

A provincial authority may also intervene when a municipality has a 'crisis of its financial affairs' (section 139 [5]). This would be when a municipality is in serious or persistent material breach of its obligations to provide basic services or to meet its financial commitments or admits that it is unable to meet its obligations or financial commitments. The provincial authority must, in this case-

- Impose a recovery plan aimed at securing the municipality's ability to meet its obligations to provide basic services or its financial commitment;
- dissolve the Municipal Council, if the municipality cannot or does not approve legislative measures, including a budget or any revenue-raising measures, necessary to give effect to the recovery plan, and appoint an Administrator until a newly elected Municipal Council has been declared elected;

When a provincial authority does not or attempts to, but is not able to, intervene in local government 'adequately', then national government must intervene in the stead of the provincial government (section 139[7]).

When reading section 154 with section 139 a provincial government should closely monitor the performance of its constituent municipalities, providing support and capacity to the municipalities prior to any intervention in

the municipality. If it is evident that the municipality is unable to meet its financial or service delivery mandate, then the provincial executive is mandated through section 139(5) to intervene.

Water Services Act

The Water Services Act also makes a provision for interventions in municipalities, where these are the Water Services Authorities.

Section 63 of the Water Services Act states that if a WSA is not effectively performing its functions imposed on it by the Water Services Act, the relevant Minister may, in consultation with the Minister for Cooperative Governance, request the relevant provincial authority to intervene in terms of section 139 of the Constitution.

If the provincial authority has unjustifiably failed to intervene, or intervened but not intervened effectively, the Minister of Water and Sanitation may assume responsibility for the function, to maintain essential national standards and meet established minimum standards for providing services. Once the Minister of Water and Sanitation has intervened, the Minister may issue a directive to the Water Services Authority stating the way the service should be implemented. The relevant minister may then intervene again by taking appropriate steps to facilitate the performance of that function including giving financial, managerial, and technical advice and assistance. If this is unsuccessful, the Minister may then take over the function in its entirety. The Minister may appoint a water services institution to perform the function on its behalf.

Municipal Structures Act

Section 84(1) and (2) of the Municipal Structures Act set out the division of functions and powers between a district and a local municipality by allocating, within a prescribed policy framework, any of those functions or powers vested in either tier of local government to the other tier of local government (with exceptions).

Section 85 of the Act allows the Member of the Executive Council (MEC) for local government in a province to adjust the division of functions and powers between the local government tiers. However, the MEC's do not have responsibility to adjust 'national' functions, such as that of water and sanitation, and electricity. Such falls to the Minister of Water and Sanitation in association with the Minister of Cooperative Governance.

In the event of the consideration for a change or adjustment in the WSA/WSP arrangements, the Municipal Demarcation Board should be consulted on the capacity of the municipality concerned. The Demarcation Board must consider the capacity of the relevant municipality to perform their vested functions and powers when determining or redetermining municipal boundaries.

Court order

Courts have intervened in the delivery of municipal services through court order aimed at ensuring that municipalities deliver on their legal mandates. In the past, these have generally been light-touch interventions where a municipality may be ordered to improve service delivery but have recently become more heavy-handed (see Box 1 below).

Box 1: Court interventions in Kgetlengrivier Municipality and Makana Local Municipality

In Kgetlengrivier Municipality (KLM), where, after many years of service interruptions and severe problems with water quality and wastewater quality management, in 2017, the local ratepayers' association secured a court order compelling the municipality to restore effective service provision immediately. When these improvements were not sustained, a group calling itself the Kgetleng Concern Residents (KCR) took the Municipality to court. The North-West High Court ruled that the municipality was indeed in breach of its Constitutional obligations for providing potable water sustainably. The presiding Judge Gura ordered the imprisonment of the Municipal Manager of KLM for 90 days for failing in his responsibilities as accounting officer, suspended under certain conditions (see separate case study at the end of this report for more information). No effective remedies were put in place, and on 12 January 2021 Judge Gura ruled that KCR

should take charge of the water and sewerage works and repair it at the expense of the municipality until KLM appointed an implementing agent to manage ongoing treatment. KCR took over the water and wastewater treatment works and raised the funds privately that were needed to restore it to sound working order within days. They were subsequently reimbursed for most expenses and are pursuing legal action for the balance. They brought in Afriforum's non-profit service delivery support entity, Pionier Services, to provide assistance. Newspaper reports quoted residents as being very happy with their performance and with the rapid improvement in the quality and reliability of water services provided.

The court ruling saw government's response split, with Kgetleng Local Municipality and Provincial Co-operative Governance and Traditional Affairs being strongly critical of the ruling, while national government minsters – the national Ministers of Environmental Affairs, and Human Settlements, Water and Sanitation, who were respondents – agreed to abide by the court's decision, effectively leaving the local government to take responsibility for the crisis.

In March 2021, KLM appointed Magalies Water as its implementing agent to run the water and wastewater treatment works in Koster and secured a court order to compel KCR to hand back control of the plant. Reimbursement to KCR for its repair and service costs was delayed, and so KRC retained control of the works from 7 January to 13 May 2022, until compelled by a further court order to relinquish it. The KCR won the right to appeal the Court ruling that compelled it to return control of the works to KLM. The case will be heard in late 2022. The KCR aims to demonstrate that the municipality is not able to provide services in line with its mandate, and that KCR should be allowed to take over for at least three years.

Another example of court intervention in municipal services comes from Makana Municipality, which is a WSA and a WSP. The municipality was awarded a Vuna award for excellence in service delivery in 2005 but has since then suffered progressively worsening deficiencies in water and sanitation related to weak demand management during severe drought, neglected maintenance, unresolved infrastructure backlogs, power supply problems, leakages, and non-payment for services by some residents. After a series of failed section 139 interventions, concerned resident groups took the Makana Municipal Council and other government entities to the High Court. They accused Makana of breaching its Constitutional obligations, corruption, failure to provide water and sewerage services, and serious neglect of municipal infrastructure. None of the respondents disputed that the Municipality was in breach of its obligations, and the Court subsequently directed the Provincial Executive Council of the Eastern Cape to dissolve the Council and place it under administration. Government appealed the decision, and the High Court appeal was dismissed in a scathing judgement. The presiding judge said that the provincial and local government 'ought to be hanging their heads in shame' for lodging an appeal against the dissolution of the municipality, in lights of its performance (SAFLII, 2020). The provincial and municipal councils have since taken the ruling to the Supreme Court of Appeal, and implementation of the dissolution ruling has been put on hold, pending the outcome of the appeal.

Summary

As can be seen from the descriptions above, the intervention framework is comprehensive. The interventions are summarised in Table 3 below.

Table 3: Summary of available water services and municipal-wide interventions

Legislation	*Location and short description*
Constitution	Intergovernmental support (S154)
	Directive (S139(1)a)
	Province takes over the function (S139(1)b)
	National takes over the function (S139(7))
	Provincial executive dissolves municipal Council (S139(1)c)
Water Services Act	Ask Province to intervene i.t.o. S139 (S63(1))
	Minister takes over responsibility (S63(2) read with S63(3))
	Minister issues a Directive to the WSA (S63(4))
	Minister takes over function (S63(5), (6) and can appoint a WSI
Structures Act	Re-allocation of function to the other tier (S85)
	Re-demarcation (S85(4))
Court order	Varies

3.3 THE PROBLEM STATEMENT

This section of the report sets out the problem statement that underpins this research. There are exhaustive references detailing the challenges facing water services in South Africa, which will not be repeated below. Readers interested in understanding these challenges in more detail should follow the references cited in this report.

Defining the 'performance' of WSAs is a challenge, as data is not always available. This section will investigate the following categories of performance:

- Access to water services;
- Quality of potable water;
- Quality of wastewater effluent;
- Level of continuity of supply;
- Extent to which faecal sludge is adequately managed;
- Levels of non-revenue water;
- Technical capacity of the WSA/WSP;
- Condition of water services assets;
- Financial sustainability of WSA/WSP;

3.3.1.1 Access

The United Nations' (UN) Joint Monitoring Programme (JMP) defines 'safely managed' water supply as having three components:

- Source should be 'improved', defined as being accessible on the premises;
- Water should be available when needed; and
- Water should be free from contamination.

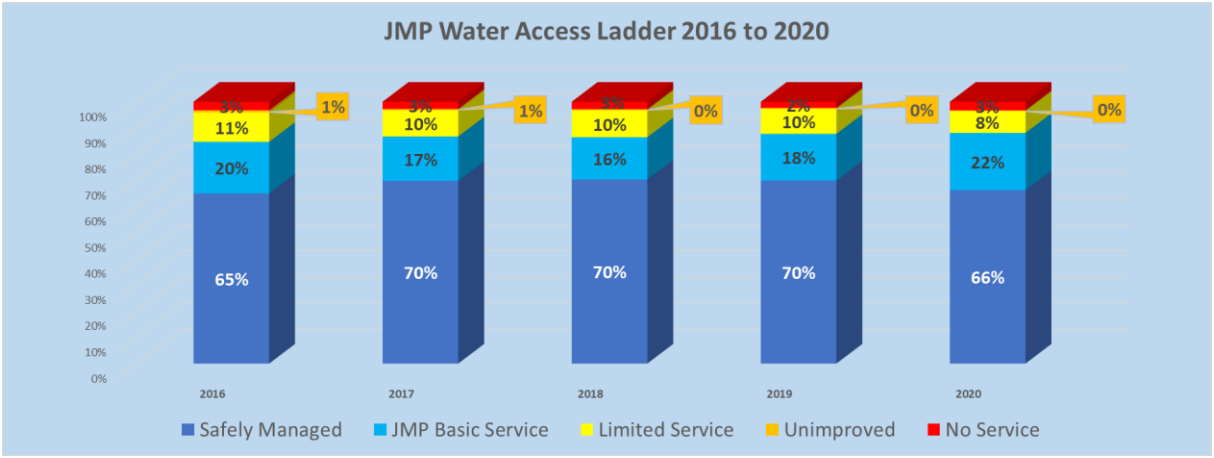

Figure 3: Access to water supply in South Africa (Source: Department of Water and Sanitation, 2022)

Figure 3 shows the proportion of South African households with access to water between 2016 and 2020. There was a positive trend in access to water services, but this was reversed in 2020. The DWS numbers presented above do not consider the availability of supply, and whether the water is of potable quality. The authors of this research performed an analysis of water access and included these categories missing from the DWS interpretation of the data. The results of this analysis are shown in Figure 4 below. These figures are lower than those presented by DWS. Note: LOS refers to Level of Service.

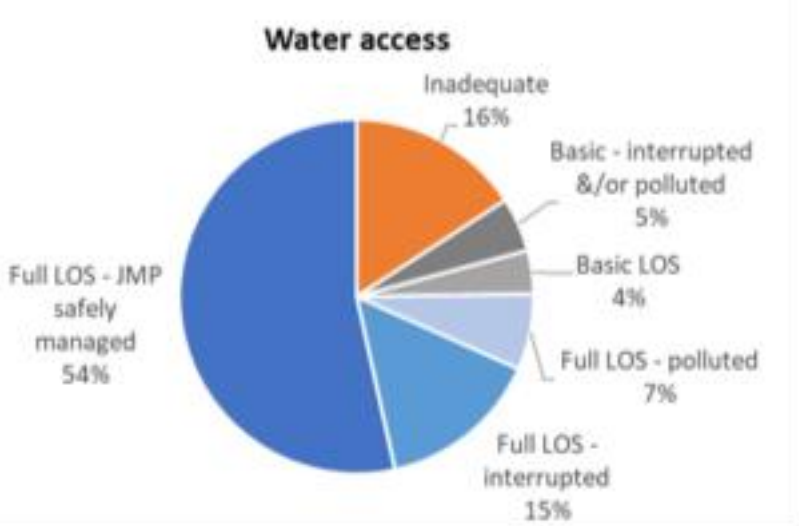

Figure 4: Access to water supply in South Africa in 2020 (Source: Author's calculations[2])

For sanitation to qualify as a safely managed service according to the Sustainable Development Goal (SDG) 6.2 requirement, effluent from wastewater treatment works, sludge from treatments works, and faecal sludge removed from on-site (hence, unshared) sanitation facilities, needs to be properly treated, managed, and safely returned to the environment. When one of these criteria is not met, the service is defined as a 'limited' service.

[2] The calculations are based on data drawn from Census 2011 and Community Survey 2016

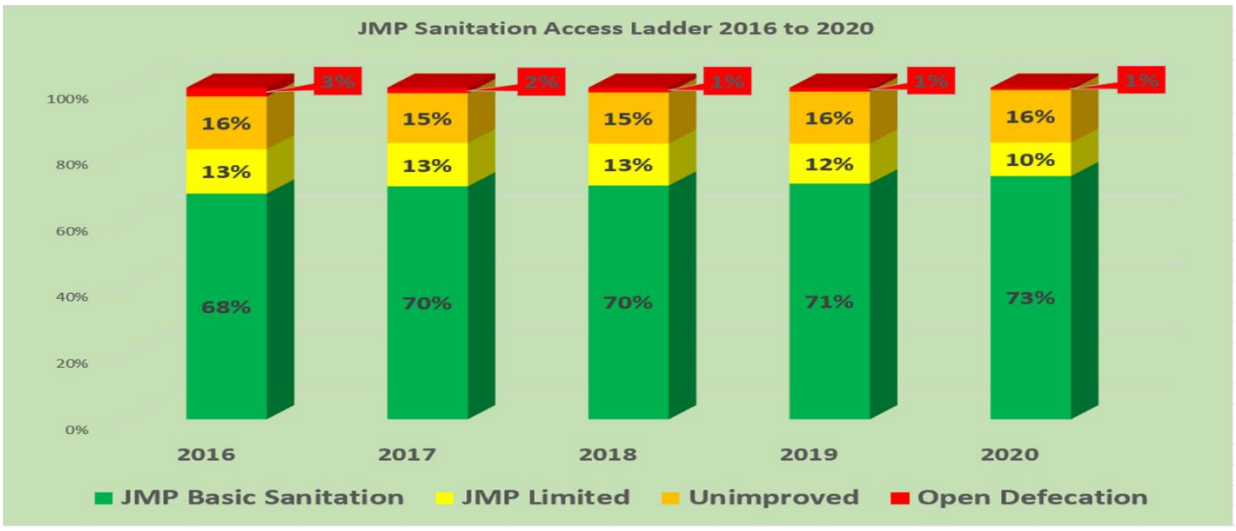

Figure 5: Access to safely managed sanitation in South Africa (Source: Department of Water and Sanitation, 2022)

Figure 5 above shows the proportion of South African households with access to sanitation services. It is evident that there is no category provided for 'safely managed' sanitation. The reason for this is that there is insufficient information available to determine the proportion of faecal sludge which has been treated adequately, in line with the definition proposed above. The proportion of households with access to basic services has been steadily increasing but is still far short of the SDG targets. The extent to which faecal sludge is treated adequately (particularly for on-site sanitation solutions) is unknown, and points to an area in which better data is required. The extent to which wastewater treatment works are releasing effluent which meets the required standards is also largely unknown.

Figure 6 below are the author's calculations that incorporates the data on effluent quality (where available). The information on shared services is derived from StatsSA Census 2011 and Community Survey 2016 data on the number of households that share toilet facilities.

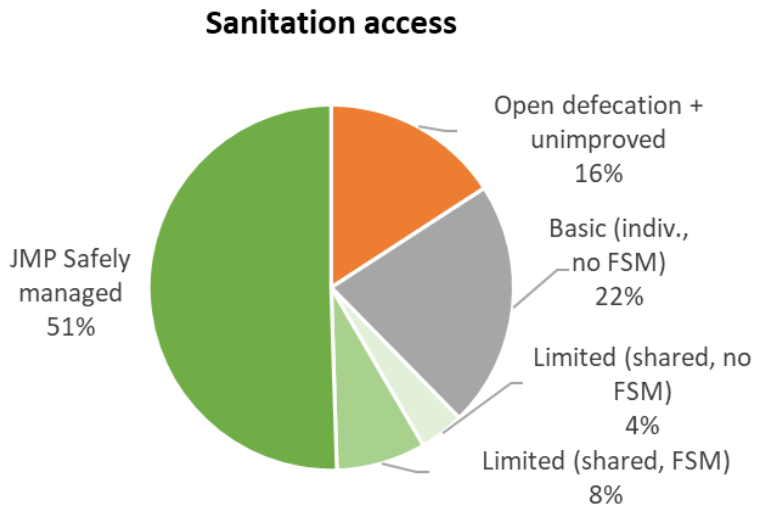

Figure 6: Access to safely managed sanitation in South Africa in relation to Faecal Sludge Management (FSM) (Source: Author's calculations)

When investigating access to water services at a subnational level, there is a mixed picture across the country. The distribution by district municipality is shown in Figure 7 below. The graph is only related to C2 district, which are WSAs. The full list of district municipalities that correspond with municipal codes can be found in Annexure A.

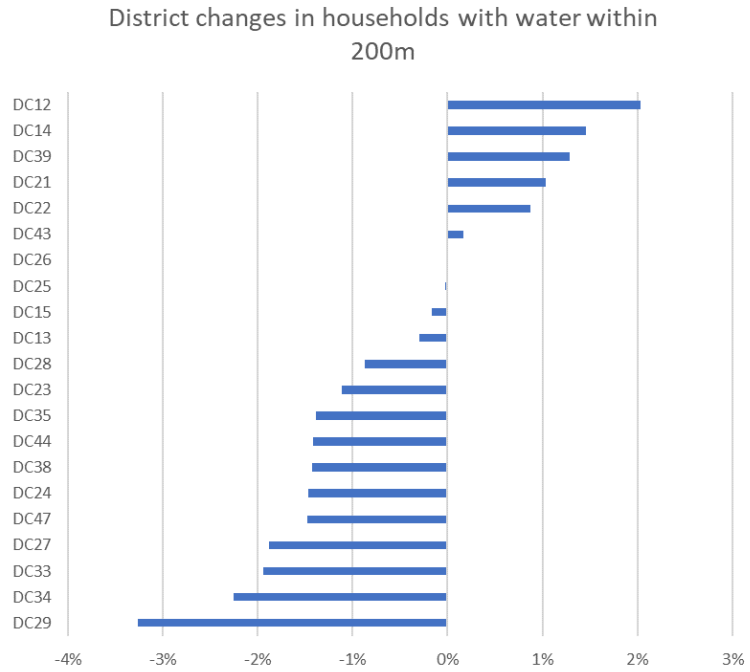

Figure 7: Changes in access to water in district municipalities (2011 to 2016) (Source: Author's calculation of StatsSA data)

3.3.1.2 Water quality

The DWS Blue Drop Progress Report 2022 contains an assessment of the water service in South Africa from 144 WSAs comprising of 1 186 water supply systems. The overall results of the analysis are shown in Table 4 below.

Table 4: Risk rating for South African water supply systems

	Low risk	***Medium risk***	***High risk***	***Critical risk***
Proportion of water supply systems in risk category	*48%*	*18%*	*11%*	*23%*

40% of water supply systems in South Africa achieved microbiological water quality compliance and 23% achieved chemical water quality compliance in 2020. 66% of water supply systems have adequate microbiological monitoring compliance and 17% have adequate chemical monitoring compliance. (DWS, 2022) The Water and Sanitation Master Plan states that approximately 44% of the 962 water treatment works are in poor or critical condition.

The DWS IRIS contains the reporting from the country's WSAs, however, there are numerous gaps in the data and some of the reporting is not accurate. These WSAs that fail to report are in breach of the regulations which govern their actions, but there is little evidence that this is being actively monitored or enforced (Palmer & Van Niekerk, 2022).

Box 2: Water quality challenges in two district municipality WSAs

Water quality varies throughout the country, and it sometimes takes a tragedy to bring the quality of water services provided to national attention. In Joe Gqabi District Municipality, a shocking incident occurred during the first three months of 2008 that significantly influenced decisions on how water services should be provided. A 112% increase in child mortality was noticed (compared to figures for 2007). Investigation of these "baby deaths" soon identified the poor-quality water being consumed as the cause. The public and political awareness of this gave rise to the leadership (political and management) of Joe Gqabi District Municipality being called to account in parliament.

At the time of the incident, the Joe Gqabi was not the WSP. The WSP function was allocated to the LMs, but due to capacity constraints in two of the LMs, Bloem Water and a private company were appointed as WSPs. Following the parliamentary enquiry, there was a recognition that water services should be the core business of Joe Gqabi District Municipality and that when service provision was delegated, the district municipality had no direct control of service delivery outcomes. All this while they still carried full responsibility and accountability. Due to this, a decision was taken to perform the WSP function internally by Joe Gqabi District Municipality.

Another district municipality that is involved in water services is Ngaka Modiri Molema District Municipality. The district is the WSA for the area, but water in urban areas is provided by the local municipalities, and some bulk water services are provided by Magalies Water. The municipality was placed under section 139 administration four times between 2009 and 2016. The municipality's financial position finally stabilised in 2016. However, the quality of water provided by the District Municipality is poor. The proportion of infrastructure at risk in the municipality was 82,5% in 2021, meaning that imminent collapse is likely, and that there are severe health risks to customers.

3.3.1.3 Wastewater quality

The DWS Green Drop Report 2021 states that 29% of wastewater treatment works were critical condition in 2013. In 2022 this was assessed to be 39%, indicating a regression in the condition of wastewater treatment works in the country. 60 Green Drop awards for performance excellence were awarded in 2013, which decreased to 22 in 2021. The mean score for effluent and sludge compliance was 19% in 2021, indicating that there are significant challenges with wastewater treatment works operations. Figure 8 below shows the changes in Green Drop Scores among C2 DM WSAs between 2014 and 2021. The majority of DM WSAs present ongoing poor, critical levels of non-performance.

The Water and Sanitation Master Plan states that approximately 56% of the over 1 150 municipal wastewater treatment works in the country are in a poor or critical condition and in need of urgent rehabilitation and skilled operators.

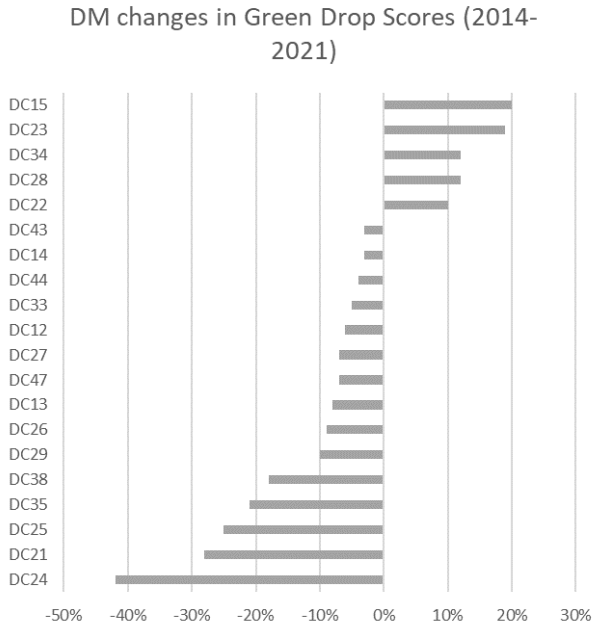

Figure 8: Changes in Green Drop score between 2014 and 2021 for C2 district WSAs (Source: Author's calculations based on DWS Green Drop reports)

When contrasting the performance on Green Drop scores of district municipality WSAs versus local municipality WSAs, it is evident that more local municipalities are improving their scores on Green Drop, than district municipalities are (Table 5).

Table 5: Proportion of municipalities (by category) improving or decreasing Green Drop score (Source: Author's calculations based on DWS Green Drop reports)

WSA Category	% improved Green Drop score	% declined Green Drop score
Local municipality WSAs	35%	62%
District municipality WSAs	25%	75%

Box 3: Poor wastewater quality

Poor wastewater quality is poisoning our rivers and endangering human health (Palmer & Van Niekerk, 2022). The most well published recent case of pollution due to wastewater is in Emfuleni Local Municipality. After seven years of interventions, Rand Water wrote in their 2021 annual report that "[t]he situation is dire, with untreated sewage running in the streets in some suburbs and ending up in the reservoir. Huge banks of sewage sludge have built up in the Loch Vaal area and the confluence of the Kliprivier and Barrage reservoir" (Rand Water, 2021). In 2018, online and print media reports on the state of the Vaal River alerted the South African Human Rights Commission to a potential human rights violation in Emfuleni LM. The report into the extent of the human rights violation was released in 2021 and concluded that the sewage problem in Emfuleni is "a crisis and an obvious liability to the State" (South African Human Rights Commission, 2021: pp.8).

Ngaka Modiri Molema District Municipality was found liable for poor wastewater services. The WSA scored 0% in the 2021 Green Drop assessment, down from only 18% in 2013. Only 5 other WSAs in South Africa performed as badly, and they were all small local municipalities with just three or four wastewater treatment plants, indicating that size of WSA may not have any direct bearing on efficacy of service provision.

3.3.1.4 Intermittent water supply

Itermittent water supply is defined as households which have water interruptions that have lasted more than 2 days at a time, or more than 15 days in total during the previous 12 months. The data is collected annually by StatsSA and is presented in their General Household Survey (Figure 9). There is no discernible trend, although it is alarming that between 1 in 4 and 1 in 5 households experience interrupted water supplies.

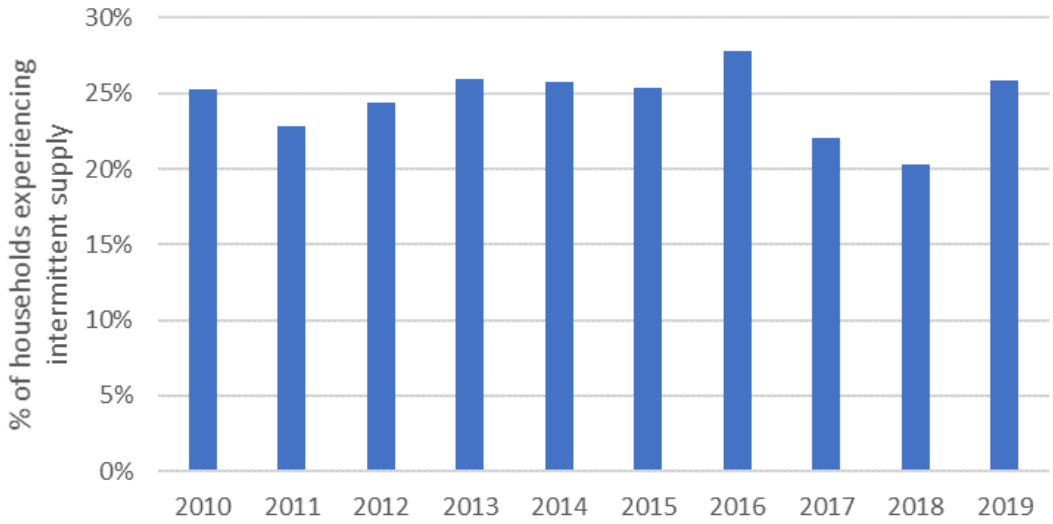

Figure 9: Intermittent water supply (2010 to 2019) (Source: StatsSA General Household Survey)

The causes of intermittent water supply include deteriorating infrastructure due to poor maintenance, increased demand due to population growth and urbanisation, water scarcity due to drought, and the growth of the demand beyond the network design limit due to poor forward planning and poor water demand management. Water shortages in South Africa are not necessarily caused by inadequate water resources but are often due to deteriorating water supply infrastructure and management and planning shortcomings (Commonwealth Governance, 2018).

Municipalities in South Africa impose water rationing, which is a type of intermittent water supply. This is done to reduce demand on the system. Other municipalities may suffer from an overall lack of water, which means that the system runs dry. In both of these scenarios, the negative pressure in the pipes may cause ingress from the surrounding groundwater, which may be contaminated by sewage (particularly in areas with on-site sanitation) (McKenzie, 2022).

Box 4: Intermittent water supply in the City of Mbombela

In 1999 the Nelspruit Transitional Local Council signed a 30-year concession agreement with the Greater Nelspruit Utility Company. The intention of the concession arrangement was for the private sector partner to inject the necessary capital and management resources into the water and sanitation operations, so it could more quickly and effectively meet the service delivery requirements in the concession area. Approximately 80% of the unbilled, unmetered households which are connected to the main Concessionaire system have intermittent supply. The urban, formal area in which the WSP is the Concessionaire has access to very good quality water, supplied 24 hours per day, whereas the peri-urban area suffers from planned outages. These planned outages are due to insufficient design capacity of the treatment works, a lack of law enforcement, and vandalism of infrastructure.

3.3.1.5 Faecal sludge management

Section 24 of the Constitution states that every person has the right "to an environment that is not harmful to their health or well-being". Poor quality effluent, river water and the presence of toxic faecal sludge contributes to creating an environment that is potentially damaging to human health.

The status quo assessment of the National Faecal Sludge Management Strategy, performed in 2021, found that there is no clear picture of faecal sludge management in the country, aside from 10 municipalities. In peri-urban and rural areas there is no data at all on the faecal sludge that arises from on-site sanitation solutions (servicing approximately 10% of the population).

3.3.1.6 Non-revenue water

There has not been a comprehensive assessment of non-revenue water in South Africa for many years. The most recent comprehensive national non-revenue water study, published in 2012, arrived at 37% (WRC, 2012). A figure of 41% was presented in the National Water and Sanitation Master Plan, but the majority of consolidated figures are unreliable. The most recent IWA water balance for South Africa is shown in Figure 10 below. The DWS database that is meant to contain the data on water balances for the municipalities in South Africa is largely empty or is filled in incorrectly (see https://ws.dws.gov.za/wsdp/Default.aspx). There has been a renewed interest in the DWS No Drop reports, which will outline the non-revenue water situation for each WSA, but there has been no timeline given as to when these reports will be published.

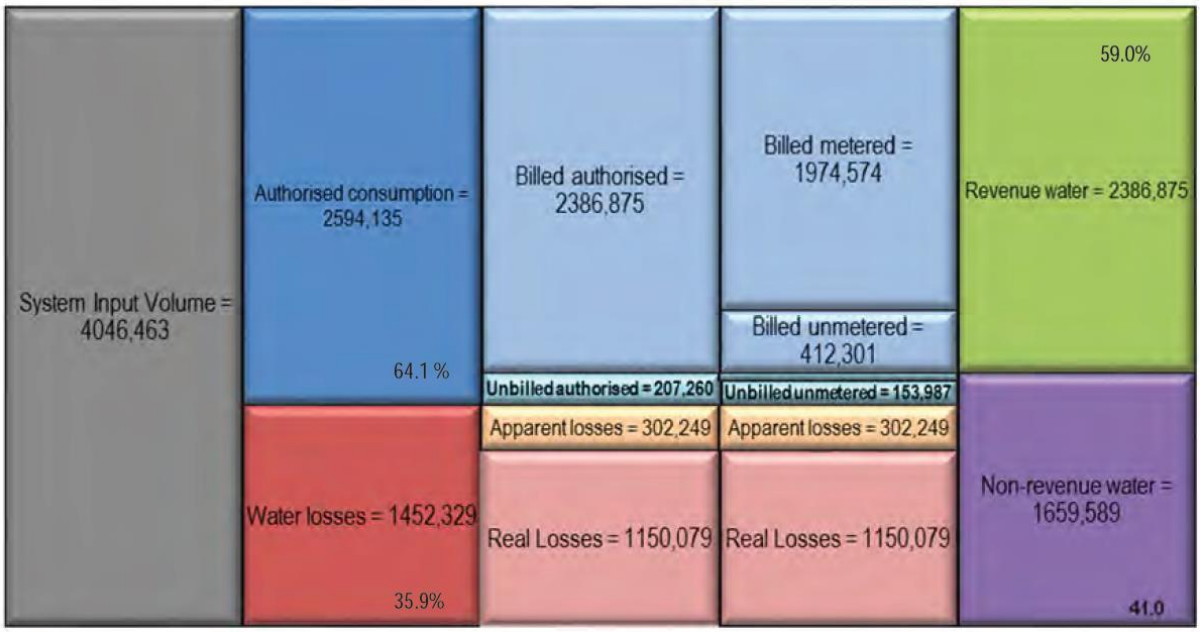

Figure 10: International Water Association water balance applied in South Africa at national level (Source: Department of Water and Sanitation, 2018:3-26)

The losses due to non-revenue water in South African municipalities, highlighted above, are high by international standards. While some of the physical losses due to infrastructure or construction defects may be unavoidable, most are due to poorly maintained infrastructure or slow responses to reports of leakage (McKenzie, 2014).

3.3.1.7 Technical capacity

The DWS Blue Drop Progress Report 2022 states that "technical skills [are] poor throughout the country with 12% of supply system in low-risk category (90-100% compliance), 27% of supply systems with sufficient

number of suitably classified process controllers per shift, 52% of supply systems with qualified supervisors, and 28% of systems with full maintenance teams in place i.e. civil, mechanical and electrical personnel" (p.ii). National Treasury collects data on the number of professionals for the different services in local government. The data is shown below, disaggregated into the municipal categories for the period 2015/16 to 2019/20 (Figure 11).

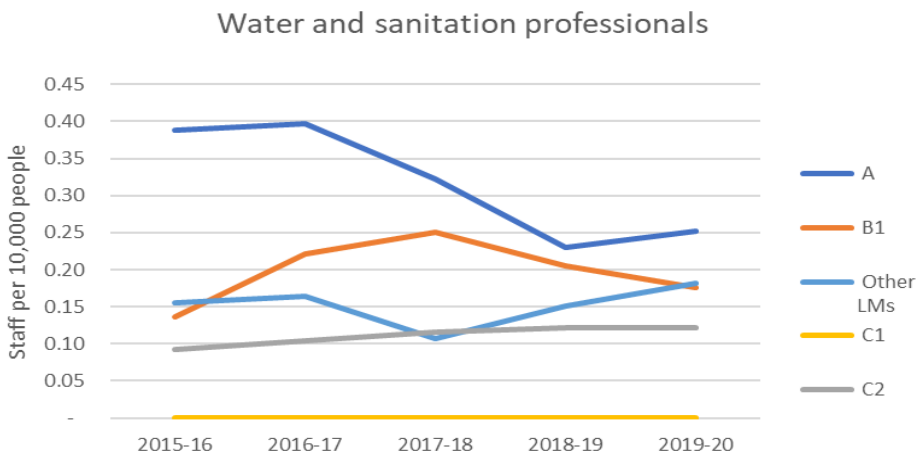

Figure 11: Water and sanitation professionals in local government (2016-2020), by type (Source National Treasury Local Government Budget database, Table SA24)

The values shown in Figure 11 above are normalised to the population in each of the municipal categories. It is evident that the municipalities with stronger economic bases ('A' category metropolitan municipalities and 'B1' category municipalities with a large economic centre) have a higher proportion of engineers per 10 000 people. More rural municipalities ('other LMs' and 'C2' WSA district municipalities) have fewer engineers. The C1 non-WSA municipalities do not have any engineers as they largely do not take on any infrastructure services. Another noticeable trend on the graph is how much the values vary from year to year. It is very unlikely that the churn of engineers or population changes significantly annually, indicating that there are likely inaccuracies in the data. But the overall trend is significant: metros are losing professionals; B1 municipalities are not gaining; while 'other LMs and C2 districts are making small gains, C2 districts off a low base.

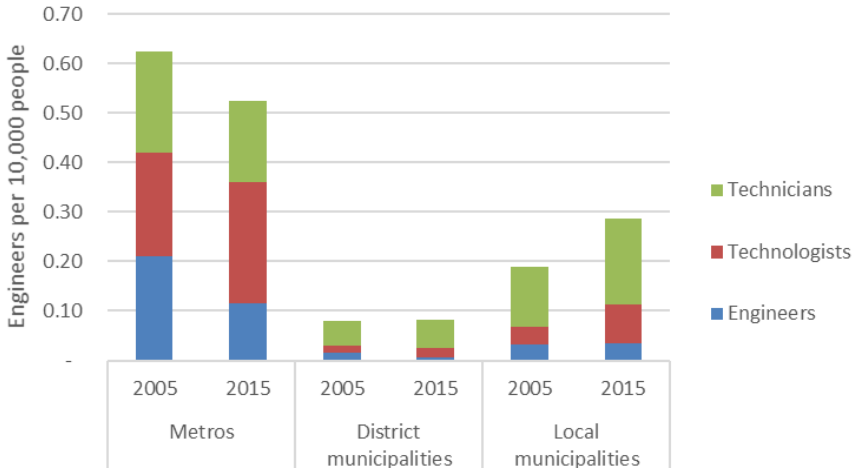

Figure 12: Engineering professionals in local government 2005 and 2015 (Source: Lawless, 2017)

Lawless (2017), building on previous work conducted in 2005, is likely the most accurate data available on civil engineering professionals in South African local government. Figure 12 above shows the ratio of civil engineering professionals (technicians, technologists, and engineers) to 10 000 people in metropolitan municipalities, WSA district municipalities and local municipalities). It is evident that the ratio has decreased between 2005 and 2015 in metros, and remained relatively constant in districts, and increased in local

municipalities. The proportion of technicians in the total engineering professionals has also increased. Technicians are generally responsible for the operations of the infrastructure and are important members of a technical team but are typically supervised by a registered engineer. The disparity between WSA district municipalities and other types of municipalities is evident and of particular concern given the technical challenge of providing services in rural areas.

3.3.1.8 Asset condition

The South African Institution of Civil Engineers (SAICE) conducts assessment of many different infrastructure assets in South Africa approximately every five years. The most recent assessment of infrastructure was released in 2022 (SAICE, 2022). The results in Table 6 for many different infrastructure classes show deterioration and overall infrastructure quality has decreased.

Table 6: SAICE Infrastructure Report card results 2006-2022 (Source: SAICE, 2022)

Sector	*Subsector*	*2006*	*2011*	*2017*	*2022*	*Trend*
Water	Bulk water resources	D+	D–	D–	D–	→
	Supply in major urban areas	C+	C+	C+	C+	→
	Supply all other areas	D–	D–	D–	D–	→
Sanitation	Major urban areas	C–	C–	C–	C–	→
	All other areas	E	E–	E	E	→
Solid waste	Collection major urban areas	C–	C	C	C–	↓
	Collection other areas	D	D	D	D–	↓
	Disposal in metros	C	C+	C+	C–	↓
	Disposal in other areas	D–	D	D–	D–	→
Roads	National	C	B	B	B+	↑
	Paved provincial	D–	D–	D	D	→
	Paved metropolitan	D–	C–	C–	D	↓
	Other paved municipal	D–	D	D–	D–	→
	Gravel		E	E	E	→
Airports	ACSA-owned facilities	B	B+	B+	B–	↓
Ports	Commercial ports	C+	B–	B–	B–	→
	Fishing harbours		C		B	↑
Pipelines	Oil and gas pipelines				B	(new)
Rail	Heavy-haul freight lines	B	B+	B+	B–	↓
	General freight lines	C	C+	C	C–	↓
	Branch lines	E	D	D–	E	↓
	Passenger lines	D+	C–	D+	E	↓
	Gautrain			A	A–	↓
Electricity	Eskom generation	C+	C+	C+	D–	↓
	Eskom transmission	C+	B–	B–	B	↑
	Local distribution	C–	D	D	D	→

Sector	*Subsector*	*2006*	*2011*	*2017*	*2022*	*Trend*
Health care	Hospitals	C	D+	D+	D+	→
	Clinics	D+	D	D	D	→
Education	Public ordinary schools		D+	D+	C	
	Universities			C+	C+	→
	TVET colleges			D+	D+	→
ICT					B	(new)
	Overall grade	D+	C–	D+	D	↓
Legend:						
	Neutral trend	→				
	Downward trend	↓				
	Upward trend	↑				

Expenditure on the maintenance and renewal of infrastructure is not adequate (SALGA, 2021). Figure 13 below shows the expenditure of different municipal categories on repairs and maintenance for all service delivery and network infrastructure functions (water, sanitation, electricity, solid waste management and road management). The calculation method shown in the graphs is a current replacement cost (CRC) based approach to calculate maintenance need. According to this calculation, municipalities are spending approximately a quarter of what is required. Metropolitan municipalities (A category) are spending the closest to the requirements (31%). Rural municipalities without a major economic centre (B4 category municipalities) spend only 3% of what is required. It should be noted that most B4s do not provide water, sanitation, or electricity services, which could be attributed to the low spend indicated in Figure 13, below.

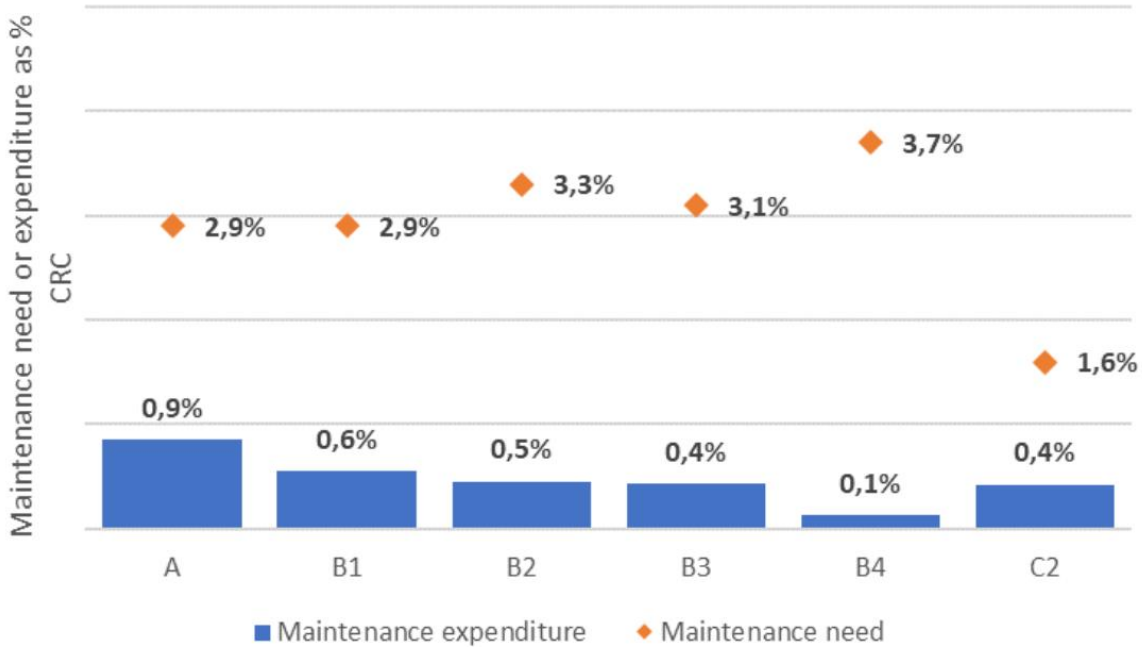

Figure 13: Asset maintenance need and expenditure by municipal category (2020) (Source: SALGA, 2021)

SALGA 2021 found that municipalities often do not have the correct staff in place, the systems, and data available to them are often inadequate, and municipalities are not allocating the money that is available,

correctly. In some cases, the transfers from National Treasury do not adequately cover the cost of maintaining infrastructure for low-income earners.

3.3.1.9 Financial sustainability

Many municipalities in South Africa, across all types of municipalities, suffer from issues of financial sustainability. The Auditor-General publishes annual reports on municipal finances in South Africa. Only 25% of municipalities were able to produce credible financial statements despite local government spending R10.4 billion on salary costs for municipal departments and R1.3 billion on finance consultants. 25 municipalities (10%) received a 'disclaimer' opinion, meaning that the financial statements and disclosures were likely inaccurate and the Auditor-General could not express an opinion on the credibility of those financial statements. 230 municipalities and 18 municipal entities showed increasing indicators of a collapse in local government finance and continued deterioration based on their financial statements (Auditor-General, 2022).

Local Government expenditure on water services totalled approximately R52 billion in 2021, and approximately R13 billion was spent on wastewater services. An analysis undertaken by the authors (Figure 14) shows that, in 2018/19, WSA district municipalities spent less per household than did WSA local municipalities. It is not clear whether this is due to increased efficiency, lower service level, or under-expenditure on existing services. The performance data available indicates that this is due to under-performance.

WSAs should be reliant on a mix of grant revenue and loans to fund capital expenditure. The extent to which municipalities can receive capital loans depends on their ability to determine applicable projects, and package these for submission to National Treasury for consideration for funding from the Municipal Infrastructure Grant, and/or package the projects to appeal to development finance institutions and private sector funders.

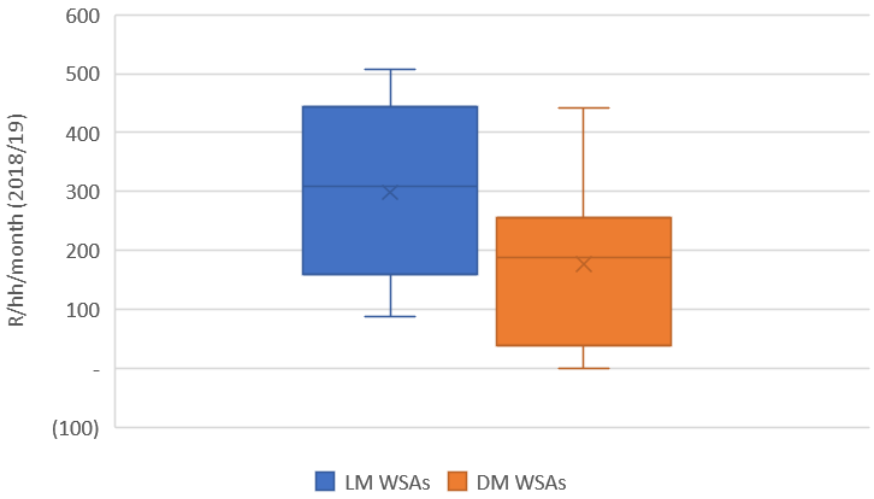

Figure 14: Local municipality and district municipality expenditure on water services, per household per month (Source: Author's own analysis[3])

Many municipalities that are involved in the delivery of a trading service (water, electricity, wastewater, and waste management) have challenges with both the receipt of payment for services rendered, and for the payment to creditors for the bulk water received.

At the end of June 2022, municipalities were owed R255.4billion, with households owing 71% of this debt. This debt is not all recoverable, with 86% of this debt older than 90 days. Municipal debtors in South African

[3] Data sourced from PDG project completed for the Western Cape Provincial Treasury: Reclassifying C1 DMs as C2s (2021)

municipalities owe more for water than for any other exchange service, amounting to R81billion. Almost 87% of this debt (R72billion) is older than 90 days. R26 billion is owed for wastewater services, of which 88% is older than 90 days.

Municipalities that have trading services roles also owe significant amounts of money. R89.7billion is owed to creditors as of 30 June 2022. Free State (91.2%,) Northern Cape (85.4%), Mpumalanga (84.7%) and North-West (73.8%) have significant portions of monies owed older than 90 days. When investigating debt to water boards in particular, slightly over R15 billion is owed to water boards. Importantly, 83.4% of debt owed to water boards is over 90 days old. This proportion is the highest of all of the categories of creditors, although Eskom is almost owed R40 billion (National Treasury, 2022).

The National Infrastructure Plan Phase 2 Draft 2 states that patronage, vandalism and 'construction mafia' activities (p.13) increase the cost of infrastructure projects, which decreases the WSAs' ability to provide sufficient infrastructure of adequate quality and undermines their financial position.

The amalgamation of municipalities is sometimes seen as an option to address issues of financial sustainability. The Municipal Demarcation Board is responsible for the delineation of municipal boundaries, after considering representations for and against the proposal. Although a comprehensive evaluation of municipal amalgamations has not been performed, there appears to the authorship team to be limited evidence that this improves financial sustainability or service delivery.

A finding repeatedly iterated is that it is near impossible to disentangle finance from governance and politics. While there have been relative improvements in financial systems and reporting, support and oversight, responses to failure remain latent with slow intervention. Linking budgets to outcomes-based strategic planning, which in and of itself has not been fully grasped, remains a challenge with knock-on effects that are far reaching and operationally disabling. (SACN, 2022)

Box 5: Financial sustainability of municipalities

Both Kgetlengrivier Local Municipality and Emfuleni Local Municipality suffer from severe financial challenges and have had section 139 interventions as a result of this. These financial difficulties have impacted on the WSAs' ability to provide water services effectively. Both municipalities are heavily grant reliant and have challenges with revenue collection. As a result, there has been an under-investment in repairs and maintenance, and low levels of capital investment in infrastructure for economic objectives, and the rehabilitation and renewal of existing infrastructure.

The water service is an important revenue source for municipalities. Local municipalities in Ngaka Modiri Molema District Municipality provide the water service in urban areas, and four out of the five municipalities are in a dire financial position. Although it cannot be said that this is a causal relationship (i.e. that these municipalities are struggling financially *because* they have the water services responsibility), these municipalities are often operating water services at a loss. The transfer of the fiscal grant from National Treasury to the district municipality does not make it through to the local municipalities providing part of the service, which compounds the challenge faced.

3.4 ROOT CAUSES OF WSA DYSFUNCTION

Root causes of WSA dysfunction have been broken down into six different categories; National and provincial arrangements, governance, organizational functionality, service levels, financial and citizen behaviour. These are each described below.

3.4.1 National and provincial arrangements

3.4.1.1 National instability

The political and organisational instability of national government manifests at provincial and local government level. While municipalities have the executive authority for water and sanitation service provision (section 156 of the Constitution and Schedule 4 Part B), national government has a Constitutional and legislative mandate to support municipalities and to intervene where and when necessary. National government plays a critical role in empowering and enabling local government, which in and of itself is complex, with a delivery machinery that requires capability, competence, stability, and consistency. Dysfunction at national level has a direct impact on its ability to provide the fundamentals that are needed. Issues of intergovernmental confusion, overlap, duplication, poor planning and coordination, and overall weak collaboration between key role-players, i.e. DWS and DCoG, regarding their respective jurisdictions for local government and water services are setbacks and stagnate what should and needs to be done. Part of the impact of this dysfunction is that provincial governments are unable to adequately capacitate themselves to support local government.

While the above holds greater relevance to the challenges of intergovernmental relations and the gaps in a capable centre that holds, macro-political instability (national level) manifests in localised political and resource wrangling. This is seen in political parties on municipal councils that are unable to work politically with each other, at ward level within communities, and in other spaces. The politics associated with access to services and service delivery in deeply contested environments is crucial for progressing development.

3.4.1.2 Two-tier local government

National government, DCoG in particular, are responsible for supporting local government and ensuring that they are structured adequately to perform their mandate. There has been extensive discussion, research, and debate on the two-tier local government system, i.e. districts and local municipalities, and the rationale (advantages and disadvantages) for retaining this structure. Thus far, there has been little political will to resolve whether there is a real issue that needs institutional restructuring, or whether the issues are more systemic and located in, for example, failures in governance, allocation of powers and functions, funding and financing, rationalisation to improve functions and span of control (more functional, capacitated LMs per DM), etc.

In his Budget Speech, 2019, the President initiated the District Development Model (DDM) as an integrated district-based approach to counter the “pattern of operating in silos” challenge which has led “to lack of coherence in planning and implementation and has made monitoring and oversight of government’s programme difficult”. The consequence has been poor delivery of services and diminished impact on the triple challenges of poverty, inequality, and employment (see https://www.cogta.gov.za/ddm/index.php/about-us/).

The DDM involves a process where joint and collaborative planning is undertaken at local, district and metropolitan municipal levels by all three spheres of government resulting in a single strategically focussed One Plan for each of the 44 districts and 8 metropolitan geographic spaces in the country, wherein the district is seen as the “landing strip” (ibid). The intent of the DDM is to provide a pragmatic intergovernmental mechanism that enables coordination of planning and implementation across all three spheres of government and involves communities and stakeholders. Recent announcements of the DDM have not provided clarity on the extent to which district municipalities will be rationalised, appreciating that the imperative is not institutional restructuring.

Previous research conducted for CoGTA and the Municipal Demarcation Board found that the number and scale of districts causes inefficiencies, and that most high-capacity local municipalities do not need districts (CoGTA, 2013; MDB, 2011). Having a two-tier system of local government can create challenges with respect

to water services where there is a split WSA function and multiple WSP arrangements in place in a relatively small jurisdiction. This may cause confusion, a duplication of corporate and billing functions, and cause unnecessary switching of WSP arrangements (such as in Joe Gqabi District Municipality). The consultation with CoGTA as part of this study enabled a better understanding of potential benefits and efficiencies in having capable LMs as both the WSA and WSP.

3.4.1.3 Inappropriate regulation

Municipalities are bound by the legislation and regulations imposed on them by national government. Many municipalities have found that the supply chain management regulations have hampered their ability to quickly contract with companies that are able to perform the work adequately.

Water services tariffs are lightly regulated, and DWS in the Water and Sanitation Master Plan argues that many municipalities have tariffs that are not cost-reflective. Many municipalities are not supported by provincial authorities in the formulation of their tariffs.

3.4.1.4 Lack of capacity in provincial authorities

Provincial authorities have generally been unable to deal with dysfunctional councils in their jurisdiction, and therefore many interventions at municipal level fail. This lack of capacity in provinces, and arguably at national level too, causes distressed municipalities to fail. Examples of failed interventions in three different provinces include Kgetlengrivier, Makana and Emfuleni municipalities.

3.4.1.5 Insufficient technical support prior to intervention

There is too little technical support given to municipalities by national and provincial government prior to intervention. Provinces are mandated by the Constitution to provide support to municipalities (section 154), but the evidence gathered for this report, indicates that there is very little technical support provided prior to intervention.

3.4.1.6 Insufficient financial support

There has been concerted effort by national and provincial government to improve the quality of the financial support provided to local government. While these are deemed as positive signs, there is still much to be done to improve the quality of the support along with facilitating an understanding of the financial support expected from National Treasury.

The perspective shared by National Treasury is captured below.

> "Water is a function that is primarily funded by the fiscus, but this shouldn't be the case, especially for water, because it is a trading service. As much as a large share of the equitable share is for water and sanitation and the same for several of the conditional grants in the system. Our understanding of the fiscal framework is that all resources are available to local government to perform its functions. For the water function, it is largely own funding. It is a function that should be self-financing. When we speak about adequacy, for us, we will look at the cost factors that we use in the Equitable Share for the operational subsidies which are limited to the provision of Free Basic Services to poor households. We'd argue that this is enough, because when we look at how much municipalities incur in terms of providing Free Basic Services, it is significantly less than what is provided for in the equitable share. Conditional grants are difficult to ascertain in terms of adequacy because there isn't objective costing in terms of the grant baselines and what is allocated to each of the municipalities. The main point is that there shouldn't be a

suggestion that this is a function that should be primarily funded by the fiscus." (National Treasury interview, 5 December 2022)

The nuance lies in the ability to have a financial line of sight in knowing the extent to which there are, for example, cost reflective tariffs, operational overheads that are not charged to the service, revenue generated through water services, and the extent to which that goes back into the municipality – and may be used to cross-subsidise other functions. The challenge lies in knowing what is reallocated to water and sanitation services to invest in its network. "Maybe system reforms are needed to allow for a proxy set of financial statements for the water service to know what is happening financially and where there are reinvestments and where not." (Ibid)

3.4.1.7 Intergovernmental fiscal arrangements

The intergovernmental fiscal arrangements do not incentivise municipalities to continually improve their performance. Operating transfers do not consider the municipal contexts when calculating the transfer required to fund Free Basic Water.

3.4.2 Governance

The National Infrastructure Plan 2050 Phase 2 (Second Draft) (p.14) has acknowledged that poor governance (together with inadequate management and technical capability) is a major contributor to poor performance outcomes. The root causes of how governance affects poor water services delivery are described below.

3.4.2.1 Senior staff turnover

In the case studies conducted for this research, there was a clear correlation between the turnover of senior leadership and a decline in the quality of water services delivered. In Emfuleni Local Municipality, there were five different municipal managers and five mayors in the years 2016-2021, and ten mayors in the period of 2004-2021. In Kgetlengrivier Local Municipality there have been a series of Acting Directors of Infrastructure and Technical Services, which has led to organisational disruptions and the consequent poor water services performance. In contrast, Joe Gqabi District Municipality has had very consistent political and senior leadership for the previous ten years. The senior leadership (so-called section 57 appointees) are appointed on a five-year contract, and two cycles have been completed for these staff, and during this time the water services provided have been better than other, similar municipalities.

3.4.2.2 Poor leadership

In almost all cases, poor municipal leadership contributes to poor municipal service delivery. Some municipal bureaucracies may be better able to insulate the service delivery departments from poor leadership, but these would be the exceptions. In Ngaka Modiri Molema District Municipality there have been political and organisational leadership challenges for 20 years. The quality of water services delivered in Ngaka Modiri Molema District Municipality has been very poor. The local municipalities are the designated WSPs to urban areas, and the district municipality provides water services in rural areas (except for commercial farms, which provide their own water supply). The district municipality is the WSA, and is therefore accountable for water services, and the relationship between the local municipality and district municipality should be governed by a service level agreement. The case study conducted for this research found that the district municipality has, to some extent, abdicated its responsibilities for water services delivery in the area of its jurisdiction, and left the local municipalities to fend for themselves. The municipal manager in Kgetlengrivier has been in place for

a number of years, overseeing a very poor performing municipality. Despite being ordered to go to jail should water services not be rectified in 10 weeks (in 2020), the municipal manager is still in place.

Good leadership undoubtably leads to efficient service delivery (despite financial constraints in many municipalities). In Joe Gqabi District Municipality, the leadership team is explicitly committed to excellence in water services provision, despite being 95% grant dependent in 2022. Although many municipalities will explicitly state their commitment to effective service delivery, it appears that the leadership team at Joe Gqabi District Municipality takes this seriously.

3.4.2.3 Political interference / local politics

The interests of elected politicians should align with those of the populace that elected them to office. However, there are numerous reports of maladministration and interference in the operations of municipalities that is detracting from the efficacy of municipal service delivery. Commonly cited examples of this include interference with decisions that should be made on a technocratic basis, interference with the supply chain management processes, and prejudicing certain areas or types of infrastructure over others. In Emfuleni Local Municipality, even when the municipality was already under a Section 139 intervention from the Gauteng provincial government, an ex-official interviewed for this research indicated that there was corruption in the awarding of contracts to assist in the clean-up operations in the municipality.

3.4.2.4 Corruption

In 2022, the National Director of Public Prosecutions, Shamila Batohi, stated that corruption is worse than she expected it to be at local government level. Given the extensive corruption that has been exposed at national government level (eradicating approximately R300 billion of South Africa's Gross Domestic Product per annum), this is a serious challenge for effective governance and service delivery.

"Money down the Drain" (Muller 2020) discusses the consequences of corruption in the water sector. Previously seen as a global leader in water resource management and provision of water services – having achieved the 2015 Millennium Development Goal for domestic water supply through the rights-based FBW policy, among other feats – Muller posits that South Africa's water sector has since declined significantly (ibid). The report analyses a range of corruption drivers and strategies including manipulation of procurement and operational processes; influencing policy and regulatory decisions; and taking control of the decision-making sites of key institutions. The impacts of corruption are far reaching and have seriously undermined water security with the most serious impacts in poor communities where service provision has been weak. The challenge is that corruption is now endemic and systemic. Muller states:

"The systemic challenges of corruption in South Africa are widely recognised and often described as a problem of state capture – a particularly damaging form of corruption that refers to the capture of decision-making centres of the state by syndicates comprising business interests and powerful political leaders. The captured institutions are then repurposed to serve the interests of their captors – the business interests gain privileged access to state contracts and regulatory decisions while the political interests use the largesse to consolidate their political power. In many cases, particularly in local government, the water sector and its activities are the victim of these larger battles over control of resources more generally." (ibid)

The South African Human Rights Commission stated that there was evidence of corruption and mismanagement of funds in Emfuleni Municipality, which led to extensive pollution of the Vaal River (South African Human Rights Commission, 2021). An oversight visit to Makana Municipality by Parliament's Portfolio Committee On Cooperative Governance and Traditional Affairs conducted in September 2022 found that the environment was dysfunctional and toxic, with the Makana Residents Association stating that the interventions conducted to date had not yielded any improvements (Grocotts's Mail, 15 November 2022). Corruption has

been alleged by municipal staff and councillors in the municipality, particularly in the area of supply chain management, but there have been no arrests made with respect to these charges.

3.4.2.5 Capacity of councillors to provide oversight

The role of councillors in technical services varies depending on the specific municipality and its organizational structure, but generally, councillors play a key role in overseeing the provision of technical services to the community. Councillors in technical services should work closely with municipal officials, engineers, and other professionals to ensure that technical services are provided efficiently and effectively. They *may* be responsible for making decisions about infrastructure projects, budgeting and financing for technical services, and overseeing the implementation of technical services. The rationale behind the role of councillors is that, ultimately, councillors are accountable to their communities and have a responsibility to ensure that the technical services provided by the municipality meet the needs of residents. Their involvement in making decisions related to technical services is important for promoting transparency, accountability, and effective governance.

However, councillors may not be adequately trained or knowledgeful enough to oversee and make decisions on technical services, such as water services. Given this, should councillors be involved in making technical decisions, and in what way can a healthy separation be made between political oversight and management of service provision?

Efforts have been made by SALGA, among others, to strengthen the capability of elected councillors by providing capacity building on the intricacies of municipal and technical management. A shortcoming is that such training has not been delivered consistently. In Kgetlengrivier, there was evidence that a lack of understanding from councillors contributed to the water services challenges being faced in the municipality.

3.4.2.6 Lack of political backing for payment by consumers

The national government subsidises water provision for poor (indigent) households in municipalities. This grant is contributed to WSAs as a component of the Equitable Share Grant, with the allocation of the Free Basic Water (FBW) provision.

However, all non-residential consumers and households using more than the FBW allocation are required to pay for the service. Poor payment levels from these consumers have often been cited as a root cause of poor water services performance. Political support to pay for municipal services is important. For example, in the City of Mbombela, there is a low level of support for payment in the peri-urban areas served by the water services concessionaire. In some areas served by the concessionaire, elected councillors have stated that residents do not need to pay for water, despite many households in the area earning above the indigent threshold.

3.4.2.7 Affordability for water services

Adjacent to the issue of political backing for payment is that of affordability. From a governance perspective, the issues in affordability include:

1. **Pricing**: Set by WSAs; however, pricing for water services is often unaffordable for many households, especially poor households.
2. **Unequal access:** Many poor and marginalized communities lack access to safe and reliable basic water services. The lack of access exacerbates the affordability issue through higher prices for water from informal suppliers or the need to travel distances to access water sources.

3. **Governance failures:** Mismanagement and corruption in the provision of water services that has resulted in inefficient and ineffective service delivery. This can lead to higher costs for consumers and a lack of transparency and accountability in the governance of water services.
4. **Inadequate funding:** Lack of adequate funding for water services with municipalities struggling to maintain and upgrade water infrastructure. This can result in higher costs for consumers and a lack of investment in long-term solutions for water service provision.
5. **Climate change:** South Africa is experiencing the effects of climate change, including increased droughts and water scarcity. The effect is potentially higher costs for providing water, further exacerbating affordability for consumers.

3.4.2.8 Failed local accountability mechanisms

The body responsible for the provision of water services is the municipality, with the council of the municipality ultimately accountable to the citizens in their jurisdiction. Intra-municipal accountability mechanisms have failed in many municipalities, and there is weak or no consequence management. Citizens are unable to hold their municipal council to account for poor service delivery, and service delivery protests may be the only recourse for dissatisfied citizens.

3.4.3 Organisational functionality

3.4.3.1 Organisational capacity: lack of experienced and properly qualified senior staff

There is evidence that some staff at local government level have been appointed to positions that they may not be adequately qualified for, and that there is a lack of qualified engineering personnel at local government level. This leads to a lack of knowledge and experience to oversee contractors implementing infrastructure works, and poor planning for necessary repairs, and rehabilitation of infrastructure.

The National Infrastructure Plan 2050 Phase 2 (Second Draft) states that “many municipalities struggle to attract and retain skilled staff, particularly in rural areas” (p.14). This is particularly evident given the poor performance of the largely rural district municipalities, and their lack of suitably qualified engineering personnel (see Section 3.3).

3.4.3.2 Procurement systems

Municipalities are responsible for procuring the service providers that they require to fulfil their legislative and developmental mandate. This procurement requires that there be systems and processes in place to ensure that the correct support is procured from appropriate service providers. In some municipalities these systems are failing. For example, in Emfuleni Municipality, weaknesses in the procurement systems of the municipality caused there to be unsuitable contractors appointed to perform work on the sanitation systems of the municipality.

3.4.3.3 Metering, billing, and collection systems to collect ‘collectable’ revenue

Another set of municipal systems need to be in place to ensure that the ‘revenue chain’ is functioning effectively. This includes that customers’ consumption is metred, that the customers are billed for the consumption that has taken place, and that the municipality has a system in place to collect the revenue that is due to them. Finally, if the revenue is not willingly paid by the customer, the municipality needs to have a credit control system in place to ensure that the revenue is collected. If any step of the revenue chain does not function effectively then there will be a lack of revenue collected by the municipality.

In some municipalities that are providing the water service there are failures along the revenue chain. For example, in some areas of the City of Mbombela, only 25% of the billed revenue is collected by the municipality. Reasons given for this include a lack of political support, the indigence of customers in the area and that there is no incentive for them to pay because the water services provider is unable to supply water on demand (i.e. less than 24 hour a day service). This situation with low levels of payment associated with inadequate service levels is commonplace.

3.4.3.4 Contract management

Section 116 of the Municipal Financial Management Act states that the accounting officer of a municipality must take all reasonable steps to ensure that the contracts that a municipality enters into are properly enforced and monitor the performance of the contractor under the contract. The relationship between a WSP and a WSA is governed by a service level agreement, which is a binding contract between the parties. In the City of Mbombela, there is a concession agreement which is the binding contract between the WSA and the concessionaire. A "brownfield"[4] concession contract included the requirement that the concessionaire pay a monthly contract implementation fee and an annual concession fee to compensate the City for costs of managing the concession. Ten and 20-year reviews of the concession contract have indicated that there have been failures from both parties to perform according to the requirements of the contract. The municipality's concession management unit has underperformed and not adequately enforced the contract, despite the failings of the municipality to honour some of its commitments. In other municipalities where there is a split between the WSA and the WSP through external mechanisms (such as Joe Gqabi District Municipality), there have been similar challenges in ensuring adequate performance.

Contracts frequently entered into by WSP's for water services are for the design and construction of the infrastructure required to perform the service. Similarly, the service level agreement contracts between WSA's and their WSP's, contracts between municipalities and their service providers should monitor and enforce the terms of the contract. In Emfuleni Local Municipality, there is evidence of poor-quality workmanship from contractors appointed to perform capital works on the infrastructure.

3.4.3.5 Technical capacity for operations and maintenance

The decision to not maintain infrastructure is often not a technical decision, it is one which is sits at the nexus of governance and organisational functionality. Lower levels of infrastructure maintenance than prescribed by the original designers of the system lead to poor infrastructure performance and accelerated aging of infrastructure.

The National Water and Sanitation Master Plan states that "[t]he operational reality is that existing infrastructure was "stretched" because of significant underinvestment in infrastructure maintenance and delays in renewal of aged infrastructure which has resulted in an accumulated backlog in refurbishment of R 59 billion" (p. 48). Under-maintenance of infrastructure is often reported as a challenge for water services. For example, Kgetlengrivier Municipality's expenditure on repairs and maintenance is slightly over half of the National Treasury's benchmark of 8% of the asset value per annum[5].

[4] "Brownfield" concession: PPP that is intended to rehabilitate, extend, maintain, and operate an existing infrastructure service system.

[5] See WRC report TT 736/17 which outlines the challenge of using this benchmark to assess municipal performance on repairs and maintenance.

3.4.4 Inappropriate regulation

3.4.4.1 Supply chain management (SCM) regulations

The SCM processes in South Africa are highly prescriptive and tightly regulated to combat fraud and corruption and ensure effective and efficient use of public resources. An unintended consequence of these regulations is that there may be service providers appointed which are not able to adequately perform the work that is required of them.

3.4.4.2 Lack of capacity at provincial and national level to provide support

In February 2022, 33 municipalities were under administration (Auditor-General, 2022). In these municipalities, provincial or national government had taken over some aspect of their executive functions and the municipalities were not able to meet their legislative and developmental mandate. The Auditor-General identified 64 municipalities with growing concern issues, that, according to the law, are candidates for a section 139 intervention due to their financial position.

The intervention framework described above has been followed in many municipalities. Evaluative assessment of the effectiveness of these interventions have been completed and documented (Greffrath and Van der Walt, 2016; National Treasury and GTAC, 2022). There is a well-publicised set of interventions in Emfuleni Municipality. The South African Human Rights Commission stated that “Unfortunately [the interventions] have not been enough to address the unmanageable situation that is occurring in the Emfuleni Municipality”, with Parliament concurring that the interventions were a failure. The Commission also stated that DWS and DCoG both failed to intervene effectively or to the extent necessary to manage the ongoing sewage crisis.

3.4.5 Service levels

Ageing infrastructure is over-stated as a cause of service delivery failure and is typically not the root cause of water services failure. The failure of infrastructure (whether old or not) is a typically a symptom of other underlying issues.

3.4.5.1 Mismatch between service levels and affordability.

The life cycle cost of infrastructure is not always considered when decisions are made on which service level to implement. Examples of this include the provision of waterborne sanitation in rural areas, when the National Sanitation Policy indicates that it would be safe and appropriate to implement ‘dry’ sanitation solutions. The implication of providing infrastructure that provides a higher service level than is affordable is that the municipality cannot afford to maintain and renew the infrastructure as customers are unable to afford the quality of service that is provided to them. The infrastructure ages faster than it is designed to and is likely to end up providing a lower quality of service than the more basic levels of service that were better suited to the area initially.

3.4.5.2 Use-it-or-lose it capital grants

The provision of use-it-or-lose-it capital grants from national government creates a moral hazard; that is an incentive for municipalities to behave in a way which is not beneficial to themselves in the long-term. These grants incentivise expenditure on projects which are larger than may be necessary for the municipality, and too expensive for the municipality over the project’s lifecycle. This has been cited as a possible reason for some of the poor service delivery in Kgetlengrivier, whereby infrastructure was constructed that the municipality was unable to afford to operate and maintain over the project’s lifecycle.

3.4.6 Finance

3.4.6.1 Internal allocation of funding to water services

Municipal Councils are largely free to determine the internal allocation of funds. The exception to this is for some grants, particularly capital grants, which are allocated with conditions from national government. The largest of the operating account grant, the Equitable Share, is unconditional, and may be spent as the Council determines is appropriate and enables the municipality to achieve its developmental and legislative mandate (such as the provision of Free Basic Water to indigent customers). All-too-often municipalities allocate too little of their equitable share to water services and allocate it to other functions – in some cases to unmandated functions – and to cover excessive overhead costs. This has an obviously negative impact on the ability of the water services departments within municipalities to provide effective services, and in particular, regarding proper repairs and maintenance of water services infrastructure, i.e. reinvestment into the network infrastructure and systems.

3.4.6.2 Transfers of money from WSA to WSP

The Equitable Share transfer is allocated to the WSA, as the ultimate authority for water services in the municipality. The WSA is not mandated to spend the money on water services, and there is no accountability to National Treasury in this regard. Where there is a separation of the WSA from the WSP, there has been evidence presented that the money that is intended for water services is not transferred through to the entity that is incurring the expenditure for water services. Between 2016 and 2022, the Ngaka Modiri Molema District Municipality retained more than 95% of the Equitable Share transfer that should have been allocated to the local municipalities acting as WSPs (although the district municipality does still retain some WSP responsibility in more rural areas). Given this situation where the Ngaka Modiri Molema District Municipality retained such Equitable Share funds, which should go to local municipalities, it is even more alarming that it is not in a good financial position, with service delivery lacking in many areas.

The Chris Hani District Municipality allocated the WSP responsibility to some local municipalities in its jurisdiction and passed through a portion of the Equitable Share grant to the local municipalities to perform the service. In 2014 the WSP responsibility was re-assumed by the district municipality, and it emerged that the local municipalities were not spending the Equitable Share transfer on water related items, and instead, using it for other purposes.

3.4.6.3 Lack of capital for lumpy investments

Capital investments for water services, particularly for treatment works, are typically large in relation to the municipality's budget. This 'lumpy' nature of expenditure on particular infrastructure items can exceed the municipality's ability to pay for them in a single financial year. Municipalities that are able to borrow money can use a loan to fund large capital investments and smooth out the repayments, but smaller or less creditworthy municipalities are not able to do such, particularly if the project is intended to provide services for social, rather than economic purposes. The implications of this for large infrastructure investments, particularly those that feed regional scale schemes, are that they are implemented in a sequential manner, that requires long-term commitments to projects. An example of this is in Emfuleni Municipality, where the Sedibeng Regional Sanitation Scheme is a multi-billion-rand infrastructure investment that is required to drain and treat sewage from Emfuleni Municipality, as well as parts of the upstream municipalities of the City of Johannesburg Metropolitan Municipality, and from Midvaal Municipality. This project has taken over 15-years to be partly implemented. One of the reasons for this is the municipality's inability to fund the necessary capital investments due to the significant amount of capital required, and the timing of the capital available through the national grants system.

3.4.7 Citizen behaviour

3.4.7.1 Construction mafia

The Preferential Procurement Policy Framework Act dictates that a point-based system should be implemented in the public sector for the adjudication of tenders. Tenders are adjudicated based on their technical compliance, broad-based black economic empowerment status and cost to the municipality. For construction projects there are 'local content' rules which dictate that a certain portion of the labour and material utilised in a project should be sourced from the local market.

Some projects in South Africa have been affected by the so-called 'construction mafia' taking advantage of these local content requirements. These are groups of individuals who will halt the construction projects until employment opportunities, contracts or bribes are provided to this group.

3.4.7.2 Vandalism

There is ample evidence of the vandalism of local government infrastructure. This can be in a concerted effort to sabotage the municipality (for example, the burning of train carriages and buses to encourage the use of the minibus taxis), the destruction of property to show grievance with decisions made, or the theft of property for resale or for the value of the material from which the infrastructure is made (such as the theft of copper fittings for the scrap metal trade).

Although evidence of vandalism is more prevalent in the transport and electricity sectors, there is evidence in water services of the theft of infrastructure and destruction of infrastructure. Vandalism in the sanitation system includes the intentional blocking of drains and sewers to be able to access the pumps and valves which may have intrinsic value.

3.4.7.3 Politically motivated sabotage

There have been accusations of politically motivated sabotage in municipalities such as Emfuleni and Ugu District Municipality. Allegations include opposition party councillors requesting citizens not to pay for services as a form of protest, encouraging citizens to vandalise infrastructure, and encouraging 'construction mafia' activities.

3.5 REVIEW OF THE WSA MODEL

This section will review the WSA model from the scope of the legislation as well as that of the institutional dimension. The Constitutional allocation of the water service to local government will not be reviewed.

In many other countries in Africa, there are large-scale national or local water entities that are providing water services under separate management from the local government entities. A comprehensive review of the merits of this against local government service provision would require a full investigation of all of the functions of local government and the fiscal framework, and is hence, outside the scope of this review.

When reviewing the WSA, it is often challenging to separate out whether the problem being addressed is a municipal-wide problem, or that of water services only. In most cases reviewed for this research, it is the former: under-performance in the provision of water services is a direct result of under-performance of the municipality as a whole, particularly its governance and leadership arrangements. The failure to provide water services effectively is fundamentally associated with poor governance, institutional and organisational gaps

and inefficiencies, insufficient skilled capacity, finance and resource management, and the broader dysfunction and distress plaguing local government.

The nexus between legislation and institutional factors in the WSA model is complex. The legislation and policy framework is clear, and the WSA model within that scope is defined. Drawing from the Strategic Framework for Water Services (2003), other strategic sector documentation and the stakeholder interviews, the institutional framework and associated factors are premised on and necessitate the establishment of clearly defined roles and responsibilities across the spheres of government (including with other water institutions) to minimise overlap, confusion, and conflict; coherence in the separation of regulatory and operational responsibilities (including governance and accountability), which emanates from the national level and influences the efficacy of the WSA model at the level of local government; flexibility and agility in the institutional arrangements given that there are contextual differences in the provision of services (rural vs peri-urban vs urban-metropolitan); appropriate selection and management of WSPs; capacity; functional intergovernmental relations; joint and coordinated planning; credible data management; and systems that fit and work. These factors are core to the WSA model from an institutional perspective, and the functionality of which has been complex.

Looking back at the initial designations of WSAs, these were made based on sound and rational criteria (circa 2002 to 2003). While there are places where these authorisations – or failure to authorise – can be questioned, overall, a solid foundation was set. In the case where a district municipality has contracted the WSP to local municipalities in its jurisdiction, it is arguable that the situation would be improved if the local municipalities were the WSAs. Ngaka Modiri Molema District Municipality is a case in point. It is notable that under the original authorisations process and based on the technical evidence reviewed, the information suggests that it should not have been designated a WSA.

There are arguments for the separation of the WSA and WSP functions where the WSP activity is provided by a separate entity (not the WSA) in that there is then a clear distinction in the roles and responsibilities excised. Such a separation of functions has been viewed as enabling efficient and effective management. The WSA is capable and capacitated to fulfil its obligations as the authority fulfilling regulatory oversight; planning; provision of effective, efficient, and sustainable water services (including water conservation and demand management); and ensuring access to water services (DWS 2003:11). The WSP assumes operational responsibility for providing water and/or sanitation services and meeting performance standards. By separating the roles of regulation and service delivery, the rationale is that it would be easier to ensure that WSPs are held accountable for delivering high-quality services to their customers as well as design, construct, operate, and maintain water supply and sanitation infrastructure. The arrangement here necessitates proper contracting through a Service Level Agreement, or similar, with the WSP and performance management of the contractual arrangement.

Where the WSA (the municipality) is also the WSP, there is no evidence that creating a separate WSA and WSP, as above, will lead to improved service delivery in non-metro municipalities. In the case of larger metros there may be an argument for splitting the WSA and WSP, particularly if they have a regulatory unit covering all services. In the very few cases where this separation is appropriate, careful definition of roles is important, and it is probable that only one person needs to act as the regulator (WSA).

In the more common situation where there is a separation of the WSA and the WSP in different institutions, the key issue is the quality of the contract and the management and the oversight of the contract. Supply chain management regulations and the public-private partnership (PPP) regulations become important, and most important, political support for an external service provider is vital (External mechanisms often appear to have less political support than internal mechanisms).

There is no evidence to suggest that one tier of WSA (i.e. District or Local Municipality) or one type of WSP is better than any other. The context in which the WSA or WSP is operating is the largest determinant of success.

The underlying geographic, social, and economic circumstances which enable better performance are likely to benefit performance of whichever WSP is providing the service. That said, where the WSP role is contracted to an external WSP, success is also dependent on political commitment to this option, the quality of the contract and the extent to which it is properly regulated.

Based on the data in Table 7.7, below, it appears that local municipality WSPs have, on aggregate, performed better than district municipality WSPs. However, it must be acknowledged that district municipalities operate in a more difficult context, with many of them covering sparse rural, or denser peri-urban areas of the former homelands. In these areas non-payment (either through a lack of willingness or a lack of ability to pay) is a perennial problem. There is no evidence to suggest that reducing the number of WSAs by shifting the function to the district level will result in an improvement in WSA performance.

Table 7: Summary of municipal performance by municipal category (Source: Authors' calculations)

Category	% population	% distressed	No access to piped water	Water interruptions > 2 days
A Metros (n=8)	*42%*	*No data*	*2%*	*13%*
Intermediate cities (n=39)	*20%*	*33%*	*4%*	*24%*
Small towns and rural LMs (n=157)	*13%*	*35%*	*6%*	*30%*
Rural districts (n=21)	*25%*	*52%*	*23%*	*54%*

The WSA model is relatively flexible and permissive, given the ability of the WSA's municipal council to determine the appropriate WSP mechanism through the Municipal System Act section 78 processes. However, whichever service delivery mechanism is selected, it is still influenced by the context of the municipality geographically, socially, and economically and by the support and regulatory arrangements at provincial and national spheres.

The Municipal Systems Act's section 78 process is intended to ensure that sound decisions are taken when appointing a WSP that is not the WSA. However, the section 78 process is treated by municipalities as procedural and is not a substantive process. Some of the section 78 processes that the authors have been involved in have had predetermined outcomes, and the process becomes a political instrument rather than a technocratic process. It is arguable that all section 78 processes should be overseen by a national entity which specialises in partnerships, whether this is with public or private partners.

Similarly, water boards, which are a specific case of an external WSP, are also influenced by the same external factors that affect any designated WSP. Water boards have been an important consideration as a WSP option; however, where there have been water boards undertaking part of the retail function there is evidence that these have not been as efficient as the designated WSP in performing this function. In some cases, the water boards have been shown to be more expensive and have had contracts terminated by the WSP/WSA. The financial performance of water boards has been flagged as an area of concern (National Treasury interview, 5 December 2022). Box 6 below provides examples of contestation where water boards were providing retail services.

Box 6: Examples of contestation where water boards were providing retail service

There is an ongoing dispute between Bushbuckridge Municipality and Bushbuckridge Water Board (subsequently taken over by Rand Water).

The contract between Ukhahlamba District Municipality and Bloem Water was ended abruptly during contestation related to performance and payment.

uMhlathuze Water has had mixed success in its ambitions to become the retail service provider of choice for northern KwaZulu-Natal.

The Amatola Water contract to provide rural services on behalf of Chris Hani District Municipality was not renewed after the two-year contract with both parties being less than satisfied with the outcomes of the contract.

Umgeni Water was very happy to have retail water assets (and the associated operational and financial responsibilities) transferred to the local District Municipality even though it built and managed the assets funded as part of the original Community Water Supply and Sanitation programme managed by DWS (then Department of Water Affairs).

3.6 REVIEW OF THE INTERVENTION FRAMEWORK

3.6.1 Review of intervention legislation

The legislation which governs the interventions in municipalities is comprehensive and prescriptive over the roles of provincial and national government when municipalities fail to adequately deliver on their legislative or developmental mandates. The framework attempts to resolve systemic governance, financial problems, administrative and organisational matters. In many instances there are political problems that necessitate political solutions. These are problems that will generally affect the entire municipal functioning and cannot be solved by sectoral interventions.

The interventions from courts have elevated critical issues to the national discourse but their mode of action has been either by enforcing that section 139 interventions should be implemented, or by circumventing the existing systems set up in section 139 of the Constitution. Courts should not be dictating institutional solutions to service delivery failure, but should rather be ensuring that municipalities, provincial executives, and national government are held accountable to their legal and developmental mandates.

Dr Phillips, the director-general of the Department of Water and Sanitation, states that there is no provision in the Water Services Act for the department to issue a directive when drinking water is not compliant. However, he said, there is a legislative review of the Water Services Act underway to empower the department to enforce compliance with drinking water quality, and that the minister can only intervene through the section 139 process (Daily Maverick, 2022).

Review of the intervention legislation is perhaps needed from a harmonisation perspective given the high degree of variation (differentiation) and fragmentation in the water sector. The root causal factors lie in the weak synergy in the governance of water services – line of sight, performance management, regulation, monitoring and reporting, and oversight. The emergent question is what the legislation offers pragmatically, and what are the options to better harmonize the Constitution, the Water Services Act, and the Structures Act and the custodians thereof to realise more successful intervention outcomes, further discussed below.

3.6.2 Review of intervention performance

The review of Constitution section 139 interventions undertaken by PARI (2019:13), concluded:
“Our 2018 investigation into section 139 interventions showed conclusively that the majority of interventions reviewed could not be termed a long-term success. …A significant number of interventions failed to record more than only marginal improvements in the selected indicators, and certainly the municipality could not be

considered as having recovered to operational and financial good health. In some cases, the state of the municipality deteriorated during and after the intervention".

The case studies conducted for this research conclude similarly: that the interventions have not been successful. The only potentially successful intervention was the 2016 intervention in Ngaka Modiri Molema District Municipality, where the financial performance of the municipality improved. However, that also coincided with them giving the WSP function to the local municipalities, thereby offloading a significant portion of the debt that they owed.

Fifty-one of the 140 interventions made between 2004 and 2017 were repeat interventions, some of which happened five times in a row. The research found that there were three factors which contributed to successful interventions: the state of the municipality prior to the intervention, the ability of the administrator to address the underlying problems, and what happens when the intervention is terminated. Each of these are discussed briefly below:

Firstly, the worse condition a municipality is in prior to intervention, the lower the chance that the intervention will be successful. The authors of the report (PARI, 2019: 13) estimate that it takes 7 to 10 years of financial prudence to fully recover from financial collapse. The implication of this finding is that there should be an early warning system that mitigates crisis and prompts the need for support. Support that is provided to a municipality, prior to intervention. In more far-gone, dire instances, interventions should begin before the municipality suffers from complete failure. This highlights the importance of having an intervention plan, described below as soon as a significant decline in performance is noticed. Unfortunately, this means that about a third of municipalities in South Africa need such a plan.

Section 154 of the Constitution requires that national and provincial government support and strengthen the capacity of municipalities to manage their own affairs, exercise their powers, and perform their functions. This includes providing them with the necessary resources, including financial, human, and institutional resources, to carry out their mandate effectively. Interventions should be a measure of last resort when all other mechanisms for supporting a municipality have failed. The case studies show little evidence of structured intense support and communication that is deliberate to avoid and avert intervention.

Secondly, the administrator themselves is a critical part of the intervention. PARI's (2019) research found that the quality and motives of administrators across the country varies. Administrators should also be supported by the existing staff and politicians in order to be able to perform their job adequately.

Thirdly, what happens after the intervention has been concluded determines a large part of the success of the intervention. Appropriately skilled and experienced senior managers (known as the section 56 managers) should be appointed by the municipality, and these staff should be supported by a cohesive Council that is committed to ensuring that the municipality becomes viable again.

It is arguable that for an intervention to be successful there must be a sound intervention plan which should be based on a sound diagnostic of the failed or failing situation. The intervention plan must also be medium-term at least. This plan must ensure that responsibility for intervention is assigned to appropriate institutions and individuals within these institutions. If the failure is due to governance or leadership of the municipality as a whole this must be dealt with by the province, for example. If the failure is related to a breakdown in service provision, then it becomes possible to apply technical interventions, water services interventions, for example. It is here where the relative responsibilities of COGTA – nationally and provincially – and DWS need to be defined.

Where the intervention plan identifies water services interventions under the auspices of DWS, the department must have identified the institution which will be responsible for the intervention. Typically, the Department has relied on water boards to lead the intervention. But the performance of water boards in this regard has been

mixed, presumably because of one or more of the following factors: weak intervention plan; lack of capacity of water board; or lack of financial resources to implement the intervention. Regarding water board capacity, as an entry point, water board performance in general has, according to the AGSA report (2022) (with exceptions in Magalies Water and Overberg Water, with clean audits) been found wanting. The causal challenges have been found in areas of governance, financial and management performance. Therefore, the ability of water boards to offer a high level of support to a failing WSA is limited. This applies particularly to retail activity as water boards have virtually no experience here. On the other hand, if the required intervention relates to technical issues associated with bulk water supply (abstraction, treatment, bulk water pumping and pipelines), water boards with spare capacity relating to these activities have a chance of intervening successfully.

Technical water services interventions may also be undertaken by private companies sent in, for example, to repair or renew some component of infrastructure. Here, the intervention plan also needs to carefully define the way any repaired or renewed infrastructure is operated and maintained going forward. DWS may need to contract such private parties themselves or require a water board to do it on their behalf.

CHAPTER 4: CONCLUSIONS

The WSA model was introduced and intended as a means of decentralizing water management and improving service delivery at the local level. While the model has had some successes, the evident failures of the WSA model are difficult to separate out from the general, systemic failures of local government. The failures of local government typically manifest in governance and accountability; poor municipal service delivery, of which the most evident has been in water services; funding and financial management; capacity, specifically technical skills, and expertise; lack of integrated planning and implementation; monitoring, reporting, evaluation; organisational and institutional dysfunction; among other factors. There is little that a better designed WSA model can do to better address these systemic failures, and more emphasis is required on treating the root causes of these failures than treating the symptoms. In other words, the research indicates that the shortcomings in providing water services are not primarily due to inherent shortcomings in the WSA model, but rather stem from systemic and structural issues within the local government system.

The **WSA model is permissive and flexible** and allows for a range of service provider options, including to enable the type of business entities envisaged in the Draft National Infrastructure Plan 2050 Phase 2. The challenge is that these operate in a tough context of increasing demand for services; decline in the technical skills available to professionally provide, manage, and maintain services; politics; regulation; and low willingness to pay for services. Municipalities are still grappling with basics and are not nearly as close to consolidation as they should be. While the original WSA authorisation criteria (circa 2001 to 2003, Table 2) were rational with the stability of WSA authorisations made at the time allowing for the establishment of a solid institutional system, there was and continues to be a degree of muddling between WSA responsibility, for example, to “ensure” provision and actual provision. Ensuring provision seems to have been interpreted as the need to separate the WSA and WSP functions. The section 78 process makes provision for this; however, the extent to which the section 78 has been carried out as prescribed in the legislation is questionable. Where initiated, many WSAs have opted to retain the function internally through, for example, their technical services department appointed as the WSP. That said, there are some cases where the authorisation or non-authorisation of the local municipality was marginal, and some of the water services function allocations have not worked out well, particularly with district municipality WSAs.

4.1 WSA PERFORMANCE AND SUPPORT

Some district municipalities have performed poorly in providing water services. This is partly due to the scale of the systems that these are operating in; a more challenging financial environment (which impacts most municipalities) and includes an over-reliance on grants for capital expenditure, low debt collection, poorly run water business, greater national fiscal constraints; but significantly due to the inability of provincial and national government to provide support. From the evidence gathered for this research, it is difficult to conclusively determine whether WSAs do not receive enough money, or if the money is spent inefficiently or inappropriately. However, previous research shows that many C2 district municipalities are highly inefficient.

Lack of support is of particular importance both because it is associated with poor municipal and WSA performance, but also because it is relatively easy to rectify if proper support programmes are set up.

4.2 INTERVENTIONS

The case studies conducted for this research show that most section 139 interventions performed to date have been unsuccessful. It has been admitted to by various oversight committees and Parliament itself, that there have been failures that have required follow-on interventions. The logical conclusion of this is that the intervenors themselves are lacking in the appropriate skills and knowledge to intervene in municipalities. Given

that this system is designed as a fall-back option when municipalities fail, the intervenors should be adequately staffed and have systems in place to deal with these interventions.

It has been seen frequently in South African municipalities that when there is underperformance from a particular department or entity on a service, there is a trend towards organisational re-structuring. This may be an appropriate solution where there is a problem that can be solved from this, however, trying to solve a systemic governance or finance problem with organisational re-structuring or repositioning is not wholly appropriate. This approach will not resolve the cause of the problem itself, and the problem will almost certainly reappear.

Courts have successfully elevated critical issues but have introduced uncertainty and instability into the system. Although these cases have not made their way to the Constitutional Court, the authors of the paper believe that the courts are best placed to hold municipalities and intervenors to account, rather than enforce changes to the service provision arrangements.

4.3 WSA/WSP ISSUES

As indicated in Table 7 (found in Section 3.5), local municipality WSPs have performed better than district municipality WSPs, and there is no evidence to suggest that reducing the number of WSAs by shifting the function to the district level will result in an improvement in WSA performance. In the case where the WSP is internal, i.e. there is a municipal WSP, the separation between the WSA/WSP is not needed and not a good idea so long as there is clarity in the functional roles and responsibilities between the WSA and the WSP, including sound regulation, performance management – monitoring and reporting against clearly defined indicators, governance, and accountability. There may be more rationalisation for the separation of WSA and WSP functions in the larger metros. The examples found of a separation are largely related to reporting; the staff allocated to the authority function are typically responsible for reporting to DWS, and not providing meaningful oversight to the WSP. The division is only feasible at a particular scale of municipality (possibly Intermediate City Municipalities, but possibly metropolitan municipalities only).

4.4 EXTERNAL WSPS

The process to determine the service delivery mechanism (the Municipal Systems Act section 78 process) appears to seldom be done properly if the process is completed at all. There appears to be no oversight and enforcement of the section 78 process by provincial and/or national authorities.

The use of external WSPs is constrained by real or perceived regulatory barriers, such as the PPP Regulations, supply chain management processes, and the section 78 processes. Where external WSPs are used, there is a lack of oversight from the WSA, and the external WSP is often not held accountable to the terms in the service level agreement. The contract management is typically poor.

Where water boards have been used as an external mechanism, either formally or informally, and have undertaken the retail function, there have typically been poor results. Historically there have been several examples of them being more expensive than the private sector and of contracts being terminated by the WSA. The case study conducted for this research on Kgetlengrivier Municipality, which is in a dire state, found that even if the retail function was handed over to the water board, it may do a better job than the internal WSP, but this would still be short of what was required.

PPPs are an important option for improving performance, as there has been some evidence that a PPP may outperform the supply of water services from other mechanisms.

CHAPTER 5: RECOMMENDATIONS

This section is structured to address the conclusions presented above.

5.1 THE WSA MODEL

Review the WSA model in relation to the authorisation of the water services function.
The research suggests the need for a review of the WSA model, specifically in relation to the authorisation of the water services function. The review should consider:

- **Strengthening governance and accountability**: Amendments could be made to the Municipal Structures Act to clarify and strengthen the roles and responsibilities of different stakeholders, including WSAs, local governments, and communities, and to establish clear mechanisms for monitoring and reporting on performance. This could help improve transparency and accountability, clarifying and strengthening the WSA model.
- **Service delivery and quality**: The review should assess the quality and reliability of water services provided by the WSA model, including the availability and accessibility of water, the quality of water supply, and the affordability of services.
- **Financial sustainability:** Evaluate the financial sustainability of the WSA model, including the funding sources, revenue generation, cost recovery, and financial management practices. In terms of legislation, consider amendments to the WSA to improve the financial sustainability of WSAs by, for example, allowing for the establishment of tariff-setting mechanisms that promote cost recovery and incentivize efficient use of water resources. This could help WSAs to generate the revenue they need to invest in infrastructure and maintain service delivery over the long term.
- **Institutional arrangements:** Consider the institutional arrangements between different stakeholders, the intergovernmental relations between DWS and CoGTA and between DWS and municipalities. Coordination and integration of water services with other sectors, and the potential for partnerships and collaborations.
- **Regulatory framework:** Examine the regulatory framework, including the legal and policy frameworks (Municipal Structures Act and the Water Services Act), the regulatory mechanisms, and the compliance and enforcement mechanisms. This includes the review of the section 78 process as well as that of intervention.
- **Enhancing community participation and engagement:** Review the Municipal Structures Act and the Water Services Act to encourage and endorse greater community participation and engagement in the management of water services. This could be by establishing mechanisms for community representation on WSAs and local government bodies, and promoting public consultations on key water management decisions.

The review should aim to identify areas for improvement and provide recommendations for strengthening the model. Such a review will have a bearing on the fiscal framework and the allocation of functions to local government, given that funding is allocated to where functions are assigned.

Review the criteria for designation of WSAs and apply these criteria to the currently designated WSAs to evaluate their ability to fulfil responsibilities and powers related to the provision of water services.
There has not been a comprehensive review of the WSA authorisations since this was initially adopted in 2001. Reviews should not be implemented on an ad hoc basis (or never at all). Given the challenges faced by water services in the country, it is time for a review by DWS and DCoG. The review must be performed using rational, objective criteria. Importantly, the financial viability of the municipalities or proposed WSA should not be a criterion. The fiscal framework should be designed to ensure financial viability, while encouraging good financial performance and service delivery.

5.2 WSA PERFORMANCE AND SUPPORT

Review the two-tier system of local government.
The review of the two-tier system of local government underway by CoGTA is necessary, particularly to rationalise district municipalities. Reviews conducted to date have recommended that there be fewer, larger districts, and that stronger local municipalities (most of the intermediate city municipalities) should be a single-tier of local government.

Review fiscal arrangements to enhance WSA/WSP performance.
A review of fiscal arrangements could enhance WSA/WSP performance. This could include mandatory reporting on sectoral allocation of the equitable share grant, incentive-based grants, and capacity building grants. These grants could be tied to technical and financial management support.

Conduct a diagnostic assessment of support initiatives and the extent to which they are appropriate.
The current support programmes are not performing adequately. These should be strengthened, or new programmes implemented to provide differentiated support to the different municipal categories (metropolitan municipalities, intermediate city municipalities, smaller local municipal WSAs, and WSA district municipalities). Some support could be provided through the National Treasury's Municipal Financial Improvement Programme (which should be extended beyond 2022).

5.3 INTERVENTIONS

Interventions should be grounded in a holistic diagnosis of the causal factors of municipal failure.
The interventions performed to date have not made a holistic diagnosis of the causal factors of municipal failure and have rather treated the symptoms of failure. When provincial or national government are planning to intervene in a municipality, there should be a comprehensive review of the municipality, and not a review of the service delivery mechanisms of the municipality. This should include a review of the municipality's functionality, capability and required people and systems. Interventions in specific services tend to overlook broader, systemic challenges faced by municipalities. Further, there are often political problems that require political solutions, as these cannot be solved by a water sector intervention.

***Review intervention legislation, including from a harmonisation perspective*.**
That is, the provisions in the Water Services Act (section 63) in relation to the Constitution (section 139) and Chapter 13 of the Local Government: Municipal Financial Management Act, which regulates interventions in terms of section 139(4) and (5). The current intervention process provides for the situation where provincial government can "step in". This tends to be a lengthy process and impractical where there is a need for more expedient intervention. In the current legislation, there are neither constitutional nor legislative measures available for the Minister to take over the functions of municipalities that are unable to fulfil their obligations. The emergent question is, within the current legislative prescripts, what can be done pragmatically, and what are the options to realise intervention outcomes more successfully rather than have disparate, parallel processes. What can be done to oblige (and give) the Minister of Water and Sanitation more powers to intervene directly? Section 139(7) of the Constitution allows national government to review and intervene in a provincial process. It would be important for DWS to review the existing provisions of the Water Services Act that deal with intervention to ensure consistency with the Constitution. This includes and involves that the Department has a clear definition and understanding of its obligations towards WSAs, its own capacity to intervene into WSAs that are in crisis, and more fully understand the section 139 process and the role that it can play in complimenting that process.

As evidenced by the case studies, section 139 interventions are complex and multifaceted processes that require a correct diagnosis of the problem to determine which part of section 139 should be invoked. Perhaps,

the emphasis should be on a meaningful, deliberate effort to strengthen and improve inter-governmental relations with WSAs with responsive support as the priority, as opposed to taking over WSAs. In dealing with crisis in WSAs, the relationships between political leadership at national and provincial level is critical, and *harmonisation* between CoGTA, provinces, National Treasury, and the sector department, DWS. While it would be sensible to review the Water Services Act, harmonisation has more to do with political and technical *cooperation* between COGTA, provinces, DWS and WSAs and the commitment of resources to support.

Address the regulatory gap in section 139 interventions.
There is need for the legislation to clarify the implementation process of a section 139 intervention. To close the regulatory gap, consideration should be given to developing a clear set of prescribed practices for section 139 interventions that can help to standardize the process and ensure that interventions are carried out in a consistent, aligned, and transparent manner.

This involves enhancing the capacity and improving the quality of the administrators themselves such that they have the necessary expertise, resources, and training to improve the effectiveness of the intervention. Better institutional support for the intervention is needed. The intervention process also needs to kick in sooner, rather than waiting for municipal failure to occur.

Emphasise the importance of an intervention plan.
In instances where failure is dire and intervention becomes the only mechanism, an intervention plan in response to a section 139 intervention decision should be designed to address the issues that led to the decision. The plan should include the following components:

- Diagnosis: Identify the root causes of the problems in the municipality, which could involve an audit of the municipality's financial, administrative, and service delivery performance to identify the key areas of breakdown and inform the development of the intervention plan.
- Goals and objectives: Establish clear goals and objectives for the intervention. These should be specific, measurable, achievable, relevant, and time bound. The goals and objectives should be aligned with the constitutional obligations of the municipality and the reasons for the section 139 intervention decision.
- Strategy and action plan: Based on the diagnosis and goals, a strategy and action plan should be developed. This should include a detailed plan of action with clear timelines and responsibilities assigned. The action plan should address the key areas of concern identified in the diagnosis, such as financial management, governance, service delivery, and capacity building.
- Implementation: Once developed, the intervention plan should be implemented without delay. This will require effective management, regular monitoring, and reporting to ensure that progress is being made. The implementation of the intervention plan should be guided by a strong governance structure that includes oversight and accountability mechanisms.
- Evaluation and review: Finally, the intervention plan should be evaluated and reviewed regularly to assess progress and identify areas that require further attention. This will ensure that the intervention is responsive to changing circumstances and that it continues to be effective in addressing the challenges facing the municipality.

In the intervention plan, it will be important to clearly separate, define and articulate the leadership, governance, and financial aspects from the technical, implementation aspects. There should be a clear distinction in the form of the arrangement and the roles and responsibilities. This will be important to mitigate inefficiencies, confusion, and delays.

Review the role of water boards as implementing agents for section 63 interventions.
There are two areas to consider in relation to this recommendation. First is the role of an implementing agent for a section 63 intervention. This is a person or organization appointed by the Minister of Water and Sanitation

to perform specific functions related to the intervention in the WSA under section 63. The implementing agent may be appointed by the Minister to assist the administrator to perform functions, such as:

1. Technical support in areas such as infrastructure planning, design, and maintenance.
2. Financial management, including the development of budgets, financial reporting, and debt collection.
3. Service delivery, in ensuring the delivery of water services to consumers in compliance with the Act.
4. Human resource management, including recruitment, training, and performance management.

The appointment of an implementing agent is typically temporary, and aimed at addressing the specific challenges facing the WSA during the intervention period. The implementing agent is accountable to the administrator and the Minister and is required to report regularly on progress and outcomes achieved. There should be a clear Terms of Reference for the implementing agent with targets and the aspects mentioned above in relation to an intervention plan.

The second area is that of water boards, as the implementing agent. Evidence has shown that water boards are not always the right option, specifically when it comes to areas outside bulk water, such as sewage treatment, customer care, and reticulation. Water boards have their own capacity challenges, including having the requisite skills for their functional responsibilities. Experience has shown that water boards have not offered the best quality of service nor the best value for money.

Given the above, it would be important to review and consider the role that water boards are *usefully* able to play, and whether or not water boards are the most suitable (fit-for-purpose) to support the decisions taken in a section 63 intervention – perhaps in the immediate to short-term.

Review and clarify the role of the courts as a means of intervention in service delivery failures.
Courts should not be dictating institutional solutions to service delivery failure. At best, courts can identify the responsible parties (including personal liability where appropriate) and prescribe the correct constitutional intervention.

5.4 WSA/WSP ISSUES

Review the water services authorisations (location of WSA).

While this research has indicated that the location of the WSA at either local or district level is effective in most cases, there is a need for a review of authorisations. This should be done as a single national process under the Minister of Cooperative Governance, in consultation with the Minister of Water and Sanitation. This review must be based on transparent and measurable criteria and not subject to political influence.

Separation of WSA and WSP within a municipality using a municipal entity.
Internal, independent municipal water entities acting as WSPs are one way of protecting water services somewhat from governance and finance issues in a municipality. However, this will only work if the autonomy that these entities have is authentic. For this to happen, the income must be ring-fenced, and governance must be independent. This would require overcoming the resistance to losing political control over an important entity. Proper WSA regulation is required in this case, and therefore will likely only work in larger municipalities.

Separating WSA and WSP where the municipality is the WSP with no municipal entity.
It is not recommended that municipalities, other than the larger metros, set up separate WSA and WSP units.

Contracting another municipality as a WSP
While there is an example of local municipalities contracting a district as a WSP the typical situation is that district WSAs contract local municipalities as WSPs. Typically, this is not done well and DWS, with the support of provinces, needs to engage with local authorities in setting up such arrangements to ensure that delegation

contracts are properly set up and that the WSP gets a transfer of Equitable Share funds to allow the WSP to provide free basic services to the poor.

Financial aspects
Overall, addressing the issue of affordability of water services in South Africa requires a multi-faceted approach that includes addressing governance failures, increasing funding for water services, improving access to water services in marginalized communities, and investing in long-term solutions for water service provision.

5.5 EXTERNAL WSPS

Evaluate the legislation to ascertain the level of inherent bias against outsourcing the WSP function, including the appointment of private providers.
A significant number of the Municipal Systems Act section 78 processes that have been concluded have not achieved the intent of the legislation; they have been largely procedural and used to rubber-stamp predetermined outcomes. The section 78 process needs to be reviewed by DCoG to become more substantive and meaningful. An independent body should be instituted to assist in the determination of the section 78 outcome and assist municipalities to make the most appropriate decision and manage the ongoing relationship with the external WSP.

Improve municipal support on how to manage PPPs.
There should be a major improvement in the support provided to municipalities in the design, procurement, and ongoing contractual and performance management of municipal PPPs. The Government Technical Assistance Centre at National Treasury is the correct locus for the support but is currently understaffed and uncertain in its support mandate to municipalities. Contract management support to municipalities by national government should be improved (e.g. standard contracts, monitoring systems, standard operating procedures, performance management, financial management, etc.).

Review and streamline the supply chain management and PPP regulations.
National Treasury should review and streamline the supply chain management and PPP regulations. Treasury should also consider reducing regulatory barriers (red tape) to private WSPs, such that they may contract with multiple WSAs under a single contract.

Carefully consider external WSP options and apply a thorough section 78 process.
The role of water boards as WSPs: There is insufficient evidence to suggest that water boards can provide water services more effectively than local government although there may be cases where this can improve service delivery. Water boards should not be seen as a panacea, and any decision to change the WSP arrangements should follow a rigorous, objective, section 78 process.

The role of DMs as WSPs: There is no evidence to suggest that district municipalities can provide the water service more efficiently than local municipalities. Any decision to change the WSP arrangements should follow a rigorous, objective, section 78 process.

5.6 WSP LICENSING

An innovative conclusion arising from this work is for DWS or the new economic regulator to issue licenses to WSPs to manage the service.
This system would clearly specify the required standards and performance requirements to be allowed to perform the WSP function internally, and consequently retain access to the water services grants (which is, ultimately, the reason why many municipalities have an in-house WSP function). The important benefit of using

this approach is that this raises the stakes for WSAs to manage the function better, rather than having to change the location of the WSP function.

While DWS is performing the economic regulation role for raw water, the same has not been met for water services. The national Strategic Framework for Water Services (DWAF, 2003) clarifies the regulatory framework for water services and raises the profile of economic regulation. The specific objectives of economic regulation are to promote the efficient use of resources through promoting or ensuring efficient investments and operations and ensuring appropriate pricing; the starting point for the application of economic regulation is for financially ring-fenced WSPs. It is important to note that economic regulation and standards regulation are highly interconnected for the reason that standards directly affect service costs (WRC, 2004). Government has stated that an economic regulator spanning the entire water value chain (raw, bulk and retail) will be created, and calls from civil society echo that this is a necessary step for protection of consumers through fair pricing for good quality water. However, the initial timeline was for the regulator to be fully functional by 2022/23. No progress has been made since 2017, when the draft business case for an independent economic regulator was first released (Department of Water and Sanitation, 2017). The independent regulator should have the ability to issue and revoke service provision licenses if prescribed standards are not met.

The implications of establishment of the independent regulator on internal and external mechanisms should be considered.

The regulator may be a party which can assist a WSA on the enforcement of contractual provisions for performance where there is a split between a WSP and a WSA.

The regulator could also oversee the section 78 process. The shifting of the WSP function is a substantial change in the manner with which water services are provided in the municipality, and therefore are a trigger for a section 78 study. However, it appears that these are not always conducted before the WSP arrangements are changed. Amending the WSP arrangement is a drastic measure taken to improve water services outcomes and should be carefully considered. Once a change has been made, there should be a longer-term commitment to ensuring that the appointed WSP is supported to achieve these outcomes. Therefore, there should be a minimum term for which a WSP is appointed, to ensure that there is long-term commitment by both the WSA and the WSP. A term of three to five years is the shortest that should be allowed.

The triggers for the section 78 processes are described in section 77 of the Municipal Systems Act. A possible trigger for a section 78 or license review could be the failure of a municipality to perform its services or fulfil its functions, using objective and agreed to measures. This may trigger a review of the current service delivery mechanism and be overseen by a body appointed by DWS. This could be seen as an intervention in line with section 63 of the Water Services Act, but rather for the WSP function than the WSA responsibility.

5.7 AREAS FOR FURTHER RESEARCH

Suggested areas for further exploration that have come up through the research process, include the following:

- Quantification of the cost of free basic services (FBS) vs Equitable Share allocation in a range of WSA contexts

  A research area that warrants further exploration is the cost of free basic services factored in a variety of WSA contexts and appraised in relation to the Equitable Share allocation provided. The questions that arise are sufficiency of the Equitable Share transfer in relation to the actual cost of the provision of FBS to poor households in varied WSA environments, what a multi-tiered approach/formula in determining the Equitable Share include, urban vs rural parameters, defining the considerations in calculating the cost of FBS, identifying where the gaps are, etc. The research will rely on access to reliable, credible data.

- Case studies around the performance of water boards in taking on WSP roles beyond the provision of bulk water and wastewater.

  Water boards play an important role in water services, but the levels of success in water boards as WSPs has been mixed. The proposal is for case study research to investigate where water boards have taken on the responsibilities associated with retail water provision, and what has the experience been from a quantitative and qualitative perspective. Some issues to consider:

  - What has been required to take on municipal responsibilities
  - Resources, including capacity needs
  - Form of the contract, e.g. Build-Operate-Transfer (BOT) contracts to run treatment works, including wastewater works
  - Institutional and organisational dynamics
  - Challenges and successes

- Regulatory barriers and potential procurement mechanisms for private WSPs serving multiple WSAs under a single contract.

  Explore the regulatory framework, emergent thinking around reforms to enable private WSPs to serve more than one WSA under a single contract. What are the countervailing themes? For example, an enabling vs. a regulating environment, stagnation vs. improved efficacy in service delivery.

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ANNEXURE

Stakeholder interviews

The following stakeholder interviews were held on the respective dates:

1. Department of Water and Sanitation (DWS), Directorate: Specialist Unit Water Services Strategy, Policy and Evaluation. 28 October 2022
2. South African Local Government Authority (SALGA), Water and Sanitation within Trading Services, Municipal Finance, Fiscal Policy and Economic Growth. 16 November 2022
3. Department of Cooperative Governance and Traditional Affairs (CoGTA), Intergovernmental Coordination in the Office of the Deputy Director-General. 01 December 2022
4. National Treasury (NT), Directorate: LG Fiscal Framework, Division: Water Services Assets and Liabilities, Cities Support Programme (CSP): Intergovernmental Relations, including water resilience in the 8 metros. 05 December 2022.

CASE STUDIES

WSA REVIEW: CHRIS HANI CASE STUDY

INTRODUCTION

The Chris Hani District Municipality (CHDM) covers a large geographical area of 36,144 km^2, across the central part of the Eastern Cape Province. In 2016, the estimated population was 840,000 people. There are currently 6 Local Municipalities (LMs) within CHDM – eMalahleni, Ngcobo, Sakhisizwe, Intsika Yethu, Inxuba Yethemba and Enoch Mgijima. Previously there were 8 LMs, but in 2016 Lukhanji, Nkwanca and Tsolwana were merged to form Enoch Mgijima.

During the period of apartheid, the areas currently under the Western LMs (Inxuba Yethemba and most of Enoch Mgijima) were part of the Republic of South Africa. At that time the areas to the east (Intsika Yethu, Sakhisizwe, eMalahleni, Ngcobo and parts of Enoch Mgijima) were under the administration of the Ciskei and Transkei homeland governments. The area to the east of CHDM is still characterised by rural / traditional settlement patterns.

From 1994 to 2003, water services in urban areas, were provided by the Transitional Local Councils (TLCs), for rural communities the Transitional Rural Councils (TRCs) performed this task. As a result of the promulgation of municipal “Powers and Functions” in 2003 CHDM became a Water Service Authority (WSA).

WSA / WSP SERVICE DELIVERY ARRANGEMENTS

Section 78

As a result of this change in service delivery responsibility CHDM initiated a section 78 study per the Municipal Systems Act 32 of 2000 in October 2005.

The study recommended that, in the west the newly formed LMs of Inxuba Yethemba, Lukhanji, Nkwanca and Tsolwana, should be given the role of Water Services Provider (WSP). However, no formal contracts were entered into between the WSA (CHDM) and the WSPs (Local Municipalities) at that time. Important to note is that there was an existing management contract in place with Water and Sanitations Services of Southern Africa Pty Ltd (WSSA) for the operation and maintenance of water supply and sanitation services for the town of Queenstown (now Komani), this being the main city within Lukhanji LM. This 25-year contract was implemented in 1992 and ran until the end of its term in 2017. While the Lukhanji LM was the WSP this management contract was administered by them. It seems that WSSA was providing management services and were not a fully-fledged WSP, especially as they never took over the billing function. The consultant working on the study’s appointment was subsequently extended to 2006, during which time they drafted WSA/WSP business plans, model contracts and S78 implementation plans.

CHDM as WSP: Enlisting the support of SSAs and CBOs: 2004 to 2007

For the eastern part of the district CHDM took on the role of the WSP internally. However, recognising that they had little capacity to perform the required tasks they enlisted the assistance of Support Services Agents (SSAs), and three such SSAs were recruited through a public tender process. It should be noted that the SSAs

operated through a management contract and were not considered WSPs. CHDM retained the role and responsibilities of the WSP.

The SSAs worked closely with Community Based Organisations[6] in carrying out the required day-to-day activities. The SSAs also provided ad-hoc technical support to some schemes that CHDM had inherited from the Department of Water Affairs and Forestry (now Department of Water and Sanitation – DWS). This arrangement ran from November 2004 to late 2007.

Appointment of Amatola Water Board: 2007 to 2009

In 2007, the Amatola Water Board (AW) was appointed to ostensibly take over from the SSAs. The mode of this takeover was envisaged to be that AW would sub-contract the SSAs and that a gradual handover of the tasks would take place. This arrangement was in place until October 2009, but during that time the Water Board attended to very little of the actual tasks and no tasks had been transferred from the SSAs. At the end of this contract, a dispute arose between CHDM and AW due to there being over-spending on the contract.

Appointment of LMs as WSPs: 2009 to 2014

In 2009 a decision was taken to appoint the LMs as WSPs across the whole district. The SSA contracts were not renewed and in 2009 CHDM put in place 3-year service delivery contracts with each of the LMs. The reason for this decision was that the SSA contracts were deemed to be expensive. There was no Section 78 study undertaken at this time. In 2012 the service agreements with the LMs were extended for a further 3-years.

The arrangement of LMs as WSPs continued until June 2014, this being the end of the term of the contracts. There was then a decision to not renew the contracts. The political leadership and management of the LMs did resist this change, and in some cases continue to argue for the WSP function to be allocated to them. This was anecdotally reported to be due to the publication in DORA each year of the amount of funding for the O&M subsidy for water and sanitation calculated for each LM. Some officials and politicians from the LMs feel that this funding should, therefore, rightfully be given to the LMs.

This change from the LMs being WSPs in 2014 was the result of a political/management decision, with no section 78 study to support it. However, CHDM did appoint a team of consultants to assist them with planning and transitional arrangements. The decision was in large part a result of frustration on the part of CHDM with the performance of the LMs. In particular, weak reporting by the LMs was causing CHDM to receive poor audit outcomes. There were observations that in several cases that the LMs had used the funds transferred from CHDM (the Equitable Share subsidy for water services O&M) on items not directly related to water services. In fact, after the termination of the WSP contracts, CHDM had to deal with a number of legal claims related to contracts entered into with service providers by the LMs, and some of these cases remain in the courts to this day. There were also challenges related to the ownership of vehicles purchased with these funds.

CHDM as the WSP: 2015 to present

Since July 2015 CHDM has performed all the WSP functions internally. They do make use of private sector contractors on an as-and-when required basis, to carry out various technical tasks related to civil, mechanical and electrical infrastructure and equipment.

The performance of CHDM since 2015 has been mixed. There have not been any interventions in the management of CHDM from authorities such as COGTA, National Treasury and Department of Water and Sanitation, but technical performance has had its challenges.

[6] The CBOs were not WSPs. CHDM remained the WSP. Using many CBOs resulted in a large complement (a few hundred people) working every day on day-to-day tasks. There were labour disputes and issues such as Injuries on Duty (IoD). Although it was never actually tested at the CCMA (close many times), the feeling was that the SSA would be deemed to be "THE EMPLOYER" of all the people working under the CBOs.

Firstly, the Water Services Knowledge System of DWS uses data from the 2011 census and the 2016 community survey to calculate the reliability of services. This system indicates that in 2011 only 24% of households with a tap in their house or yard had a reliable supply of water (Provincial Average = 33%). For those households with access to a communal standpipe at a 200m walking distance the analysis indicates that 33% of households have a reliable service (Provincial Average = 44%). Data from 2016 indicates an improvement to 39% of house/yard connections being reliable (Provincial Average = 38%). Also, the reliability of communal standpipes has improved to 50% (Provincial Average = 50%). The basic measure of whether households reported having experienced an interruption to their water supply decreased from 66% to 44%. This improvement being measured for all households in the district with access to water through any of, a house, yard or communal tap (Provincial Average = 48% and 35% respectively).

Secondly, a total of 32 systems were assessed as part of the 2021 Blue Drop Progress Report. Within these systems there is a mixture of medium sized and small towns, as well as rural areas. Eighteen of these systems were assessed as being low-risk, six were identified as medium-risk and eight were deemed to be in a critical state. The assessors recommended urgent action on the part of CHDM to address: 1) effective monitoring of flows; 2) implementation of corrective measures to address microbiological and chemical water quality issues; 3) improved sampling of water; 4) appointment of skilled staff; and 5) development and use of water safety plans.

Thirdly, in 2011, CHDM achieved a Green Drop score of 31%. In 2013, performance improved, and the score rose to 52%. However, the 2022 score indicates a decline in performance to 44%. This score placed CHDM 5th of the 14 WSAs in the Eastern Cape Province. In all, 16 systems were assessed for CHDM. Of these 9 were observed to be operating at 100%, or in excess, of design capacity. Of the 16 systems, 9 were deemed to have “Critical Risk Ratings”.

The financial statements of CHDM for the 2019/20 financial year indicate that of the total cash received by the municipality, 35% was from tariff collection. This being a marked increase from 15% in the previous financial year, and 7% for the year before that (2017/18). Significantly, the cash received from service charges in 2019/20 was almost 100% of what was billed. In the previous year, the amount collected was 56% of the billed amount, and for 2017/18 a figure of 31% was reported. While the level of payment of bills appears to be unrealistically high, it is noted that there has been an absolute growth in cash received from R84,605,208 to R299,926,662. This increase of 3.5 times has been achieved in the three-year period between 2017/18 and 2019/20.

CONCLUSION

Chris Hani District Municipality has implemented several service delivery mechanisms over the past 20-years, some more successful than others. From this experience there has been a steady progression of the strategy of the Municipality towards having internal capacity to provide water services. In interviews with current staff it was noted that the current WSA / WSP legislative provisions do result in a situation where the municipality is both “referee and player”, and the sentiment was that this does require review. They also noted that while Provincial and National Government Departments do provide support, this often amounts to no more than the secondment of people who have no real experience in what is required for the provision of water services in a municipal environment. The frustration expressed was that “the people deployed have never really played the game”. If support is to be provided by other Government Departments, or organisations (e.g. Water Boards), there will be a need for them to significantly improve their own capacity regarding being able to provide meaningful and useful assistance.

WSA REVIEW: EMFULENI CASE STUDY REPORT

BACKGROUND TO THE WSA

Emfuleni Local Municipality (LM) (GT421) is situated within Gauteng Province's Sedibeng District Municipality, on the western region of Gauteng. In 2019, Emfuleni LM had a population of 721 663. The local municipality covers an area of 967.6 km^2 with a density of 745.8 people per km^2. The average household income is R29 400 per annum.

Figure 15: Emfuleni Municipality in Sedibeng District Municipality

Source: (Wazimap, n.d.)

Emfuleni LM was established in 1999 and there have been no demarcation changes.

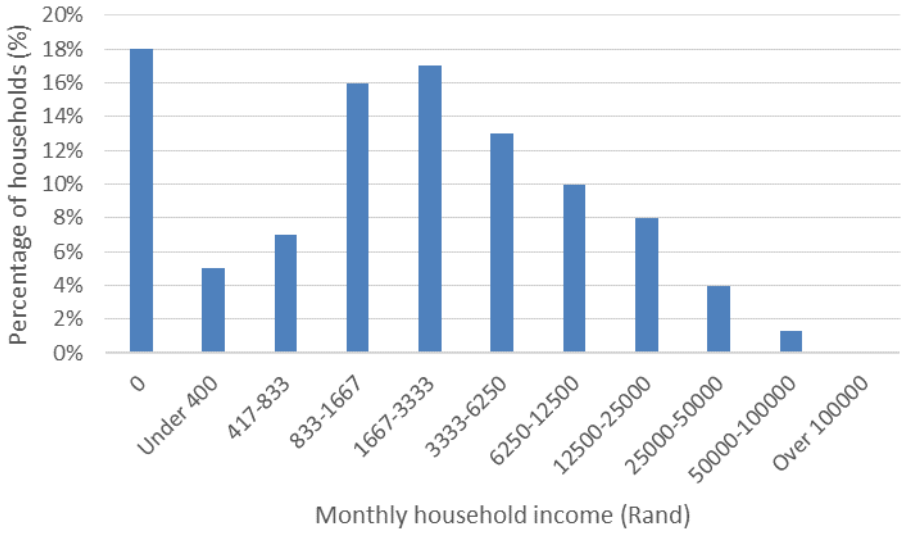

Figure 16: Monthly household income in Emfuleni

Source: (Wazimap, n.d.)

Emfuleni LM is the Water Services Authority (WSA) and buys most of its treated potable water from Rand Water, although it does treat a small amount of its own water. Due to the topography of the region, and Emfuleni LM's location on the banks of the Vaal River, the municipality receives sewage from the City of Johannesburg Metropolitan Municipality as well as the Midvaal Municipality. Approximately 25% of the influent to the largest wastewater treatment works (WWTW) (Sebokeng) is from the City of Johannesburg Metropolitan Municipality, and 5% from Midvaal Municipality. There is a monthly payment made for accepting this wastewater, but the issue of escalation was never included in the original contract, so the other municipalities are only paying a fraction of the actual cost (Interviewee). The population and economy in the catchment area for Sebokeng WWTW is growing at a significant rate, and therefore this plant is due for an upgrade (Interviewee).

Under normal circumstances (i.e. without the involvement of other parties on an emergency basis) water services in Emfuleni LM are operated by Metsi-a-Lekoa. Metsi-a-Lekoa is described on the Emfuleni LM's website as a "dedicated water services authority entity for Emfuleni Local Municipality and its core functions is the water and sanitation functions of the Municipality" (Emfuleni LM, 2010). This is a misnomer, as Metsi-a-Lekoa is neither a WSA, nor a municipal entity. Metsi-a-Lekoa was created in 2003 (News24, 2003), with an estimated operating budget of R40 million, although the extent to which Metsi-a-Lekoa was funded at the time is unknown. The website states that the purpose of Metsi-a-Lekoa is to operate, manage and maintain existing water and sanitation infrastructure in the Emfuleni area, and that the functions are to maintain the water distribution system, the sanitation system (including WWTW's) and manage operational projects. The website states that, at the time, Metsi-a-Lekoa was responsible for managing capital projects in the area (Emfuleni LM, 2010), however this has changed, and the municipality's Infrastructure Directorate is responsible for new capital projects (Interviewee). An interviewee defined Metsi-a-Lekoa as a "quasi-municipal entity". The intention was to set Metsi-a-Lekoa up as a municipal entity, as defined in the Municipal Systems Act, but the was never completed. In essence, it operates as a municipal department, with a slightly different structure, and is headed by a Chief Director, as opposed to an Executive Director (Interviewee).

A Municipal Systems Act Section 78 ('S78') study was undertaken in 2008-2009 for the establishment of the Sedibeng Regional Sanitation Scheme (SRSS) (Shabalala, 2010). At the time it was noted that there were already "long term [sic] sanitation issues in Sedibeng". Much of the emphasis of the S78 study was on the sanitation situation in Emfuleni. A team of consulting engineering firms were appointed at the time to implement the interim emergency measures, as well as the long-term technical solution. The outcome of the S78 study is unknown, but interim reporting indicated that there were organisational capacity challenges at Emfuleni LM, which hindered the municipality's ability to run the existing plants. Rand Water was contracted at the time to supplement Emfuleni LM's operational capacity. The municipality has had numerous capacity interventions by the Gauteng provincial government over time. These interventions are described more in a later section of this case study.

The timeline shown in the figure below presents an overview of the significant events that have taken place in Emfuleni LM. Some of which have been highlighted above and are further discussed in the sections below.

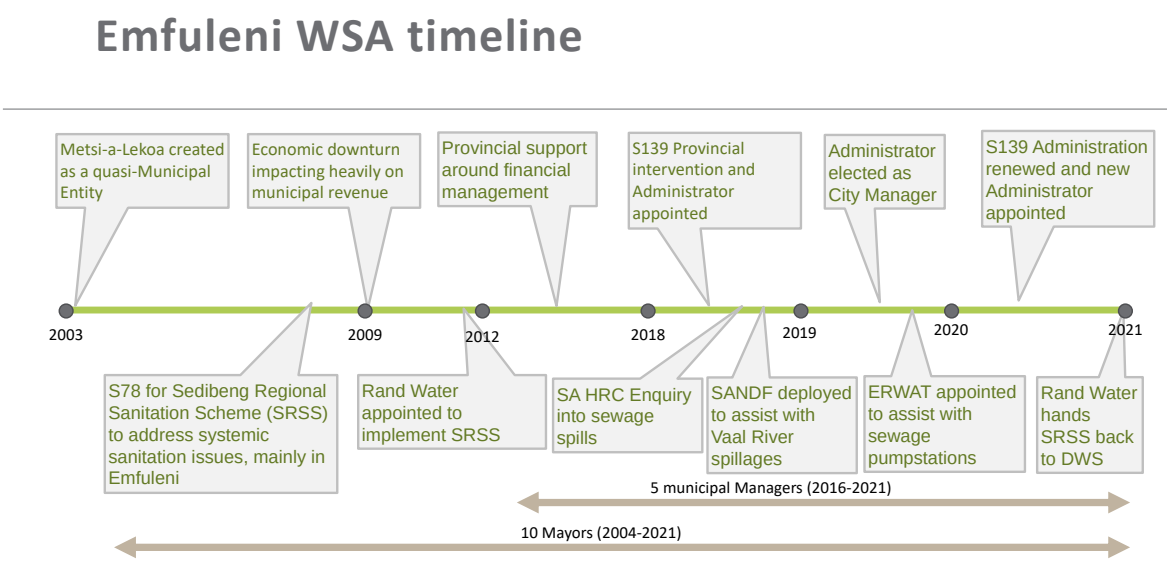

Figure 17: Emfuleni LM timeline – 2003-2021

WSA SERVICE DELIVERY PERFORMANCE

Quantitative indicators from analysis:

Table 8: Water service levels 2011-2016

Service level	*2016*	*2011*
Flush toilet connected to sewerage	90.6%	88.2%
Piped water inside dwelling	73.3%	69.9%

Source: (Municipalities, n.d.)

Water access changes: 2011-2016

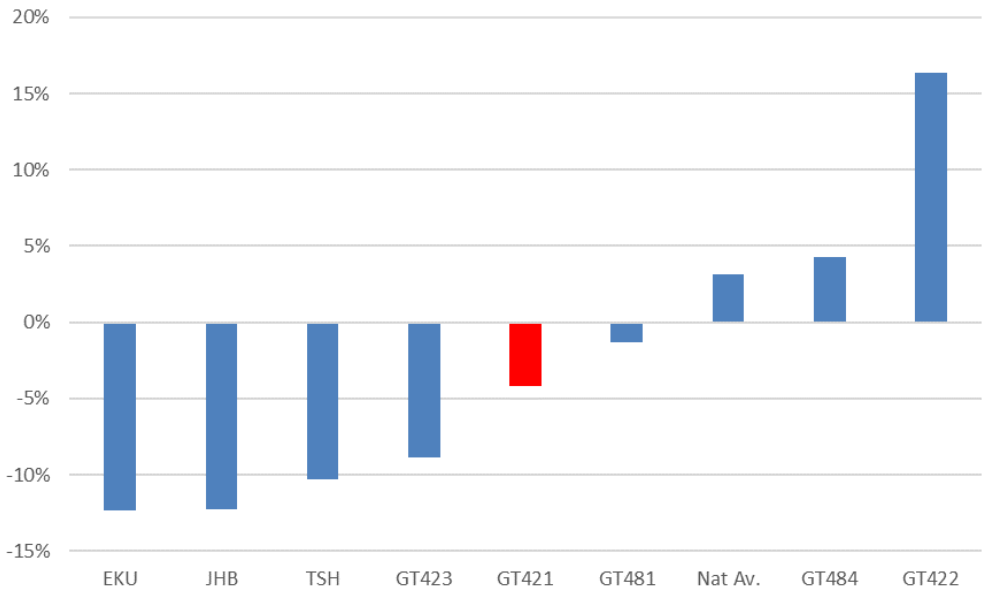

Figure 18: % change in water access in the Gauteng

The municipality is located between the declining mining towns in the Free State and the economic prospects of Gauteng and has therefore experienced a significant influx of people over time. Consequently, there has been significant increase in the number and size of informal settlements in the municipality which has led to an overall reduction in the proportion of households with adequate water access in the municipality.

Changes in sanitation access: 2011-2016

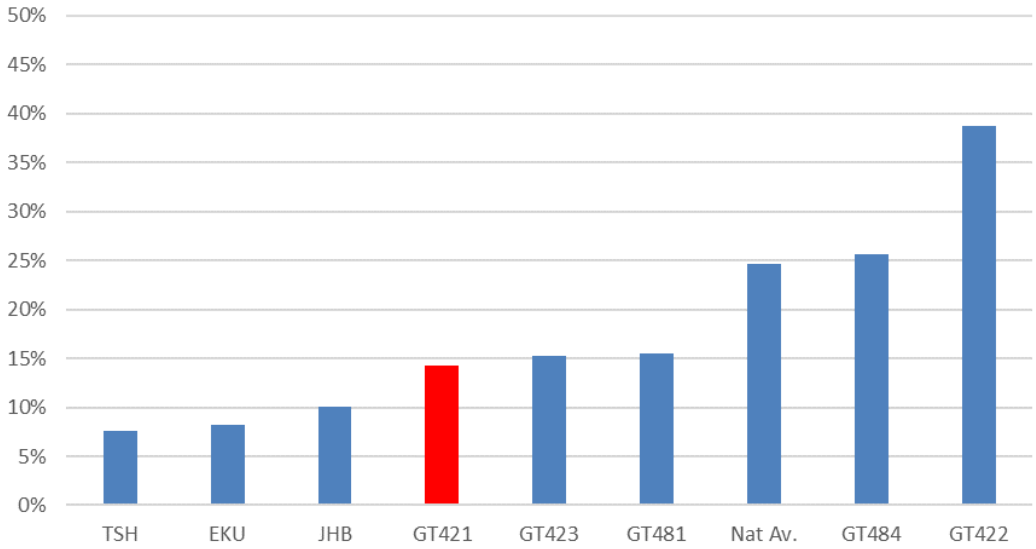

Figure 19: % increase in households with access to adequate sanitation access in the Gauteng

Despite the aforementioned influx of residents to Emfuleni LM, access to sanitation has increased. This has coincided with a national drive to increase access to adequate sanitation services.

Wastewater performance – Green Drop score: 2013-2021

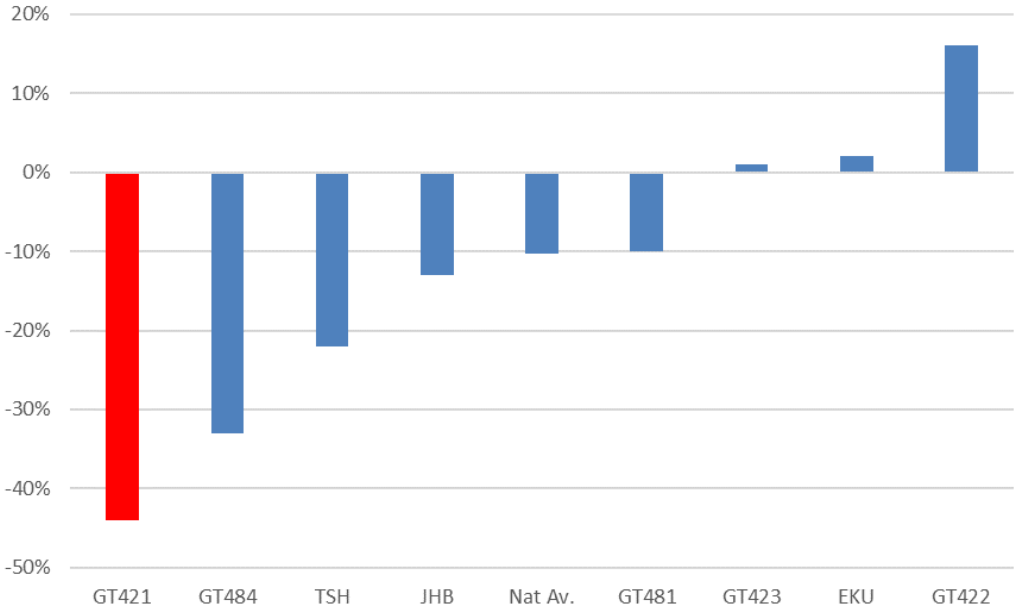

Figure 20: % Change in Composite Green Drop score, 2013-2021

Unsurprisingly, given the significant sanitation challenges in Emfuleni, the Green Drop score has decreased significantly between 2013 and 2021. The Green Drop identifies the following interventions that are required

by Emfuleni LM and its Water Services Provider, Rand Water, at a rough estimated cost of R624 million (Department of Water and Sanitation, 2022a):

1. Vandalism and theft
2. Electricity supply dysfunctional
3. Mechanical upgrades required as most units have deteriorated due the non-functioning of the works
4. Civil upgrades required – especially on the biofilters
5. Mechanical, Civil & Electrical upgrades are required at all works.

According to an interviewee, the major water services issues are with sanitation, and in particular, with wastewater effluent quality. An example of the challenges that face the municipality was that some of the bulk sewer lines are upward of 70 years old, and in very poor condition (Interviewee).

Non-revenue water

The most recent available figures for non-revenue water and physical losses in Emfuleni LM are shown in the table below (Rand Water, 2021b).

Table 9: Non-revenue water and water losses in Emfuleni LM

Financial Year	Non-Revenue Water	Water Losses
2018/19	44,4%	42,7%
2019/20	58,0%	56,3%
2020/21	68,8%	57%

The Blue Drop scores are not available for Emfuleni LM at the time of writing.

WSA FINANCIAL PERFORMANCE

Below are quantitative indicators that provide insights into Emfuleni's financial performance as a WSA.

Water services operating account position

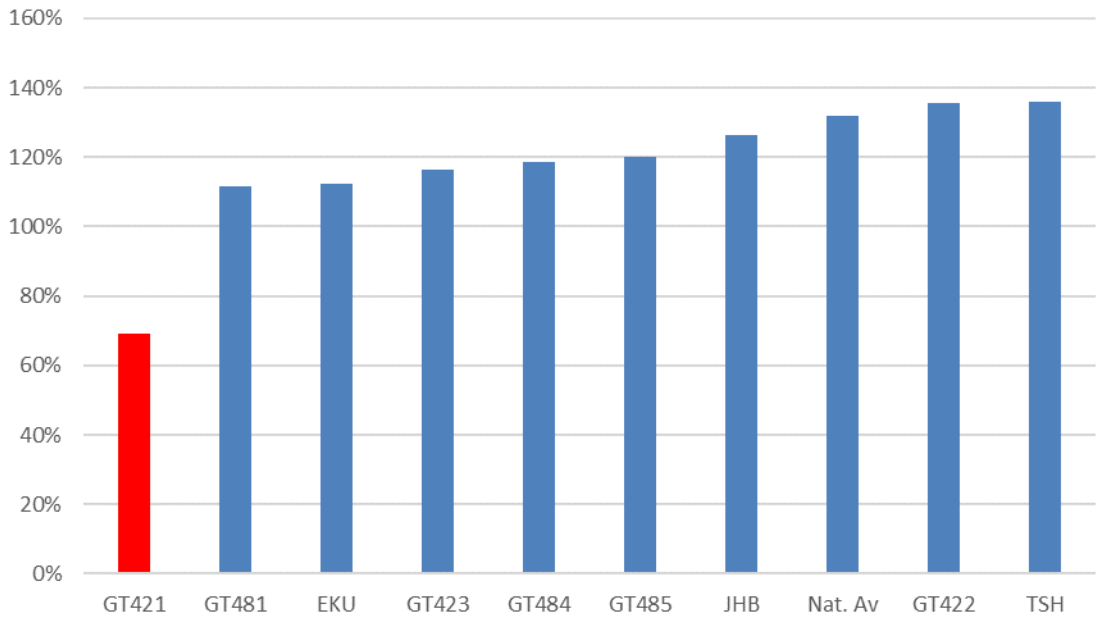

Figure 21: % of water expenditure covered by revenue (surplus/ deficit)

Water services tariff coverage

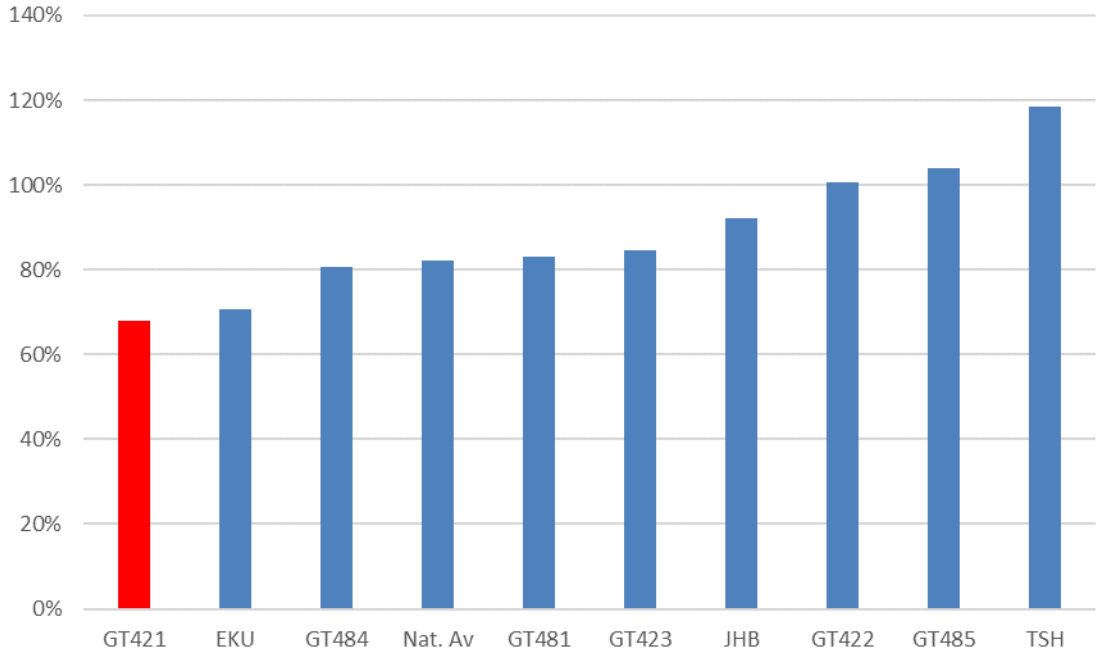

Figure 22: % of water expenditure covered by tariffs in the Gauteng

Tariff revenue per high income household

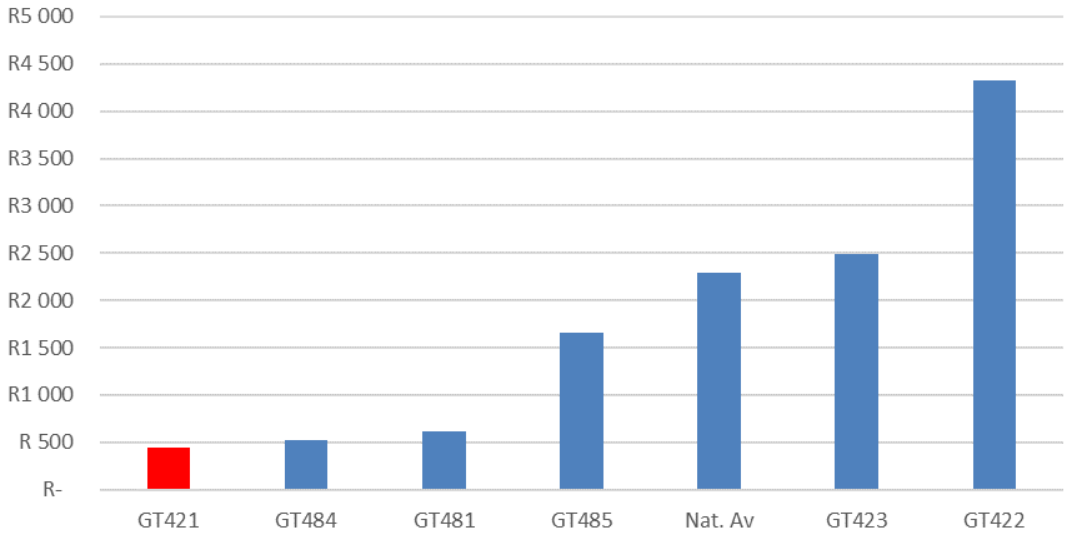

Figure 23: Average tariff revenue per High income household in the Gauteng

Tariff revenue per high income household is a good indicator of fiscal effort. It is evident that Emfuleni LM collects very low income per high income household in contrast to the other local municipalities in Gauteng.

Audit performance

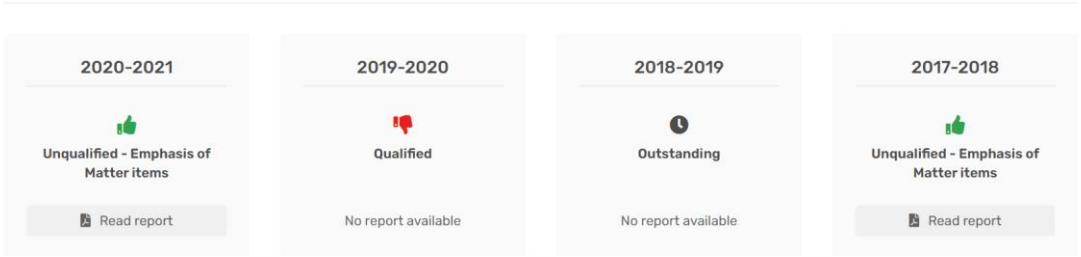

Figure 24: Audit Outcomes

Source: Municipal Money (n.d)

The municipal audit results were not completed in 2017/18, as one of the Auditor-General's auditors were shot in the leg while performing the audit (IOL, 2019). The municipality received an unqualified audit (with findings) result in 2020/21, even though the Auditor-General has raised 'going concern problems' in Emfuleni for four financial years (Auditor-General of South Africa, 2022).

Cash coverage

The cluster of bars is ranked from left to right with Emfuleni as the first bar and Mogale City last.

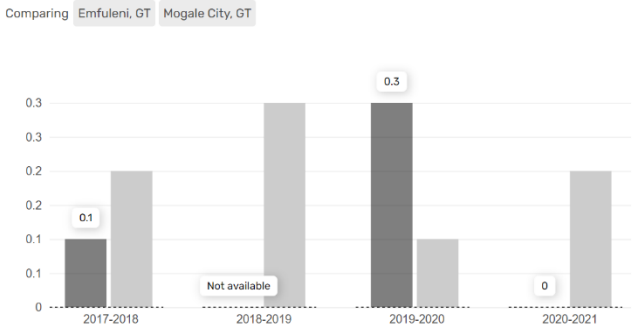

Figure 25: Cash coverage for Emfuleni and similar GP municipalities

Source: Municipal Money (n.d)

Spending of capital budget

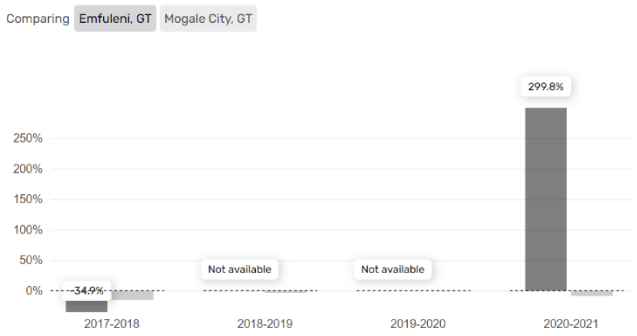

Figure 26: Spending of capital budget for Emfuleni and similar GP municipalities

Source: Municipal Money (n.d)

The municipality struggles to spend its capital budget. According to an interviewee at the municipality, the contractors that have been selected by the municipality have not performed adequately, but the municipality has been unable to hold the contractors to account (Interviewee; SAHRC, 2021).

Figure 26 above indicates too that the municipality's budgeting for capital expenditure is not accurate.

Spending on repairs and maintenance

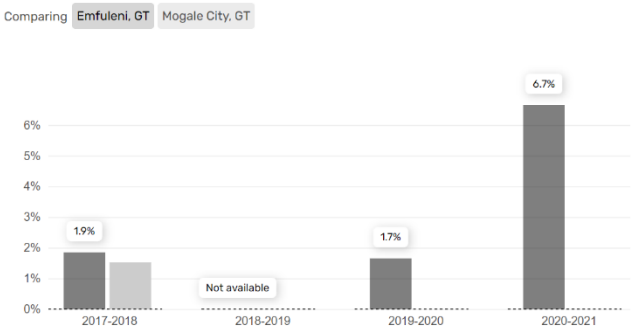

Figure 27: Repairs and maintenance for Emfuleni and similar GP municipalities

Source: Municipal Money (n.d)

Fruitless and wasteful expenditure

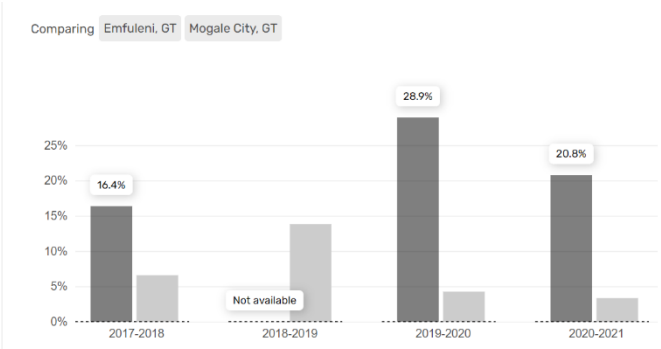

Figure 28: Fruitless and wasteful expenditure for Emfuleni and similar GP municipalities

Source: Municipal Money (n.d)

Current ratio

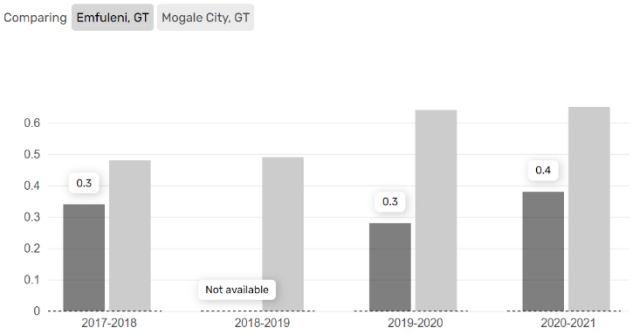

Figure 29: Current ratio for Emfuleni and similar GP municipalities

Source: Municipal Money (n.d)

Liquidity ratio

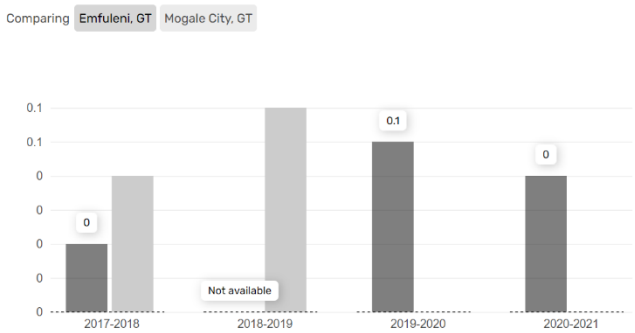

Figure 30: Liquidity ratio for Emfuleni and similar GP municipalities

Source: Municipal Money (n.d)

Current debtors collection rate

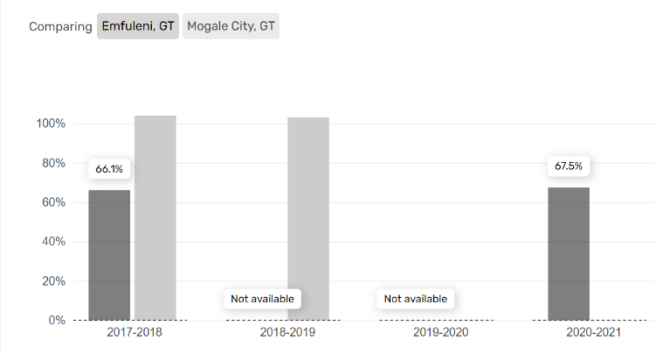

Figure 31: Debtors collection rate in Emfuleni vs. similar districts in GP

Source: Municipal Money (n.d)

National conditional grants

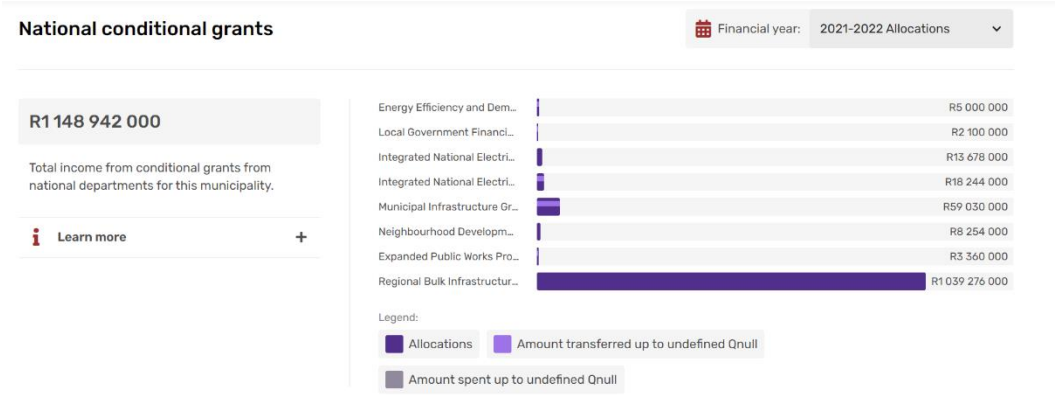

Figure 32: Total income from conditional grants from national departments in Emfuleni

Source: Municipal Money (n.d)

Sources of Revenue

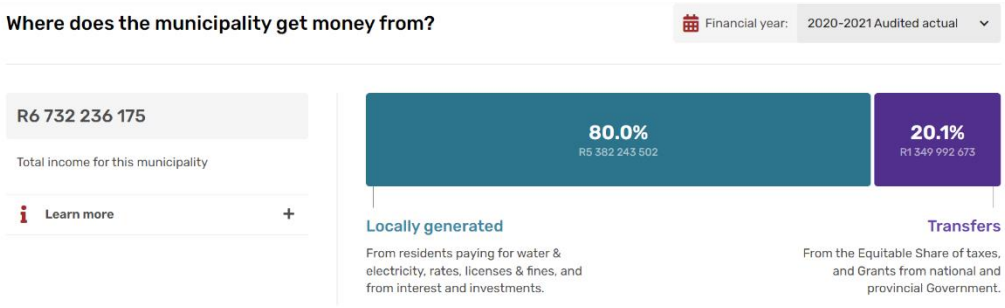

Figure 33: Sources of revenue for Emfuleni

Source: Municipal Money (n.d)

Staff wages and salaries

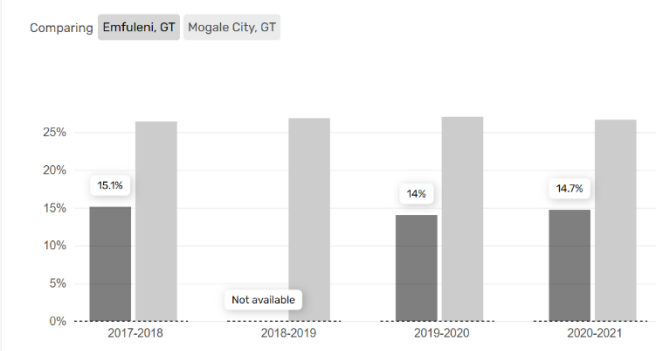

Figure 34: Staff salaries and wages as a % of operating expenditure in comparison to similar municipalities

Source: Municipal Money (n.d)

There is a history of non-payment in Emfuleni LM. The pre-democracy Kopanong Bantu Administration did not adequately expand and maintain the infrastructure in the area of its jurisdiction, which, according to an interviewee, may have become a sustained negative association towards governing institutions from the populace entrenched in the area. A municipal interviewee called this administration a “puppet administration” (Interviewee). As a result, there were frequent rates boycotts, which continue to this day. This is compounded by decades of poor service delivery, which does not encourage tariff payment. In addition, large businesses in

the area (such as ISCOR) have long-term payment agreements at low rates which erodes possible cross-subsidising opportunities (Interviewee). It was also stated that concerted media campaigns from opposition political parties aimed at decreasing payment rates by alleging corruption and mismanagement by the incumbent political leadership. The contract for the meter reading, reconnection, disconnection and monitoring of water users was also given to one service provider, which "negatively impacted credit control governance and segregation of duties" (Parliamentary Monitoring Group, 2020). Separate service providers for different functions were appointed in 2019, which was expected to improve revenue collection. The extent to which the improvement has taken place is unknown.

Emfuleni LM is in a poor financial position, despite the support that it has received from provincial and national government over the previous five years. The municipality is not able to cover the cost of water services from tariffs and operating transfers and is not collecting revenue from the households that should be paying for services. The municipality is also unable to spend adequately on the necessary capital assets.

GOVERNANCE HISTORY

Emfuleni LM has been under the political leadership of the African National Congress (ANC) since the municipality was created in 1999. Since 2019 the municipality has been under the leadership of a coalition between the Patriotic Alliance and the ANC.

The Chief Director of Metsi-a-Lekoa, Sam Tshabalala, left the unit in 2004, and returned as the municipal manager in 2009. He was removed as municipal manager in 2017 after being accused of irregularly awarding contracts worth over R150 million that were never implemented. The status of these accusations is unknown. Tshabalala was replaced as municipal manager by Oupa Nkoane, even though he was implicated in a forensic report for gross negligence and dereliction of duty (IOL, 2019). There has been a high turnover in senior leadership, with there being approximately five municipal managers and five mayors in the years 2016-2021 (there were 10 mayors in the period of 2004-2021 (SAHRC, 2021)). This turnover was associated with alleged looting and corruption in the municipality, which in turn led to significant discouragement for lower-level employees who, allegedly with the support of unions, held labour go-slows and earned significant overtime (Interviewee).

Large-scale infrastructure interventions in Emfuleni LM have mostly been implemented as part of the SRSS. The SRSS is a mega sanitation project that is scoped to upgrade Sebokeng WWTW to 200 Mℓ/d; upgrade Meyerton WWTW by 15 Mℓ/d; upgrade Leeuwkuil, Rietspruit WWTWs and upgrade regional pipelines. The SRSS was jointly agreed to by Rand Water, Department of Human Settlements Water and Sanitation, Emfuleni Local Municipality, Midvaal Local Municipality, Sedibeng District Municipality and Gauteng Province. Part of the project was implemented by Rand Water in 2012 until February 2021, where it was transferred back to the Department of Human Settlements, Water and Sanitation (Rand Water, 2021a). Many of the different components of the project were not implemented, with Midvaal Municipality implementing their own water services projects as though it would never be implemented. Emfuleni LM planned for the project, but assumed that funding would be sourced by DWS, and therefore did not allocate capital to SRSS projects (Interviewee). The National Treasury did allocated funds ultimately to the SRSS from the Regional Bulk Infrastructure Grant, including an allocation of R1,04 billion in 2020-2021.

Section 154(1) of the Constitution states that "[t]he national government and provincial governments, by legislative and other measures, must support and strengthen the capacity of municipalities to manage their own affairs, to exercise their powers and to perform their functions". Support to Emfuleni LM by other spheres of government has been provided for more than a decade. The support to Emfuleni LM from provincial government was increased in November 2015, focussing particularly on improving debt collection, reducing distribution losses, developing credible indigent registers and implementing savings on expenditure

management (Parliamentary Monitoring Group, 2018). Sedibeng District Municipality provided institutional support, through the placement of a Municipal Manager and Acting Chief Financial Officer in 2015. These staff left the municipality when their contracts expired. The NCOP found in 2018 that the Section 154 support, implemented in 2015, failed to make sufficient impact and thus further intervention was required (Parliamentary Monitoring Group, 2018). The NCOP also recommended that "[t]he Municipality should prioritize and accelerate the technical infrastructure support team (SANDF engineers and other professionals) to urgently address the sewer spillages, in particularly the Vaal River and fix non-functional water and waste water treatment plants in Emfuleni Local Municipality" (Parliamentary Monitoring Group, 2018).

In March 2017, Rand Water entered a three-year partnership with Emfuleni LM to provide advisory services to its three main wastewater treatment works, and monthly laboratory services, despite Emfuleni LM owing Rand Water "billions" of Rand for bulk water provision (SAHRC, 2021, pp.4). It was identified at this time that there were low inflows to the treatment works due to blocked outfall sewers and malfunctioning transfer pump stations (Rand Water, 2020). The South African National Defence Force (SANDF), in the form of its SA Army Engineer formation, was deployed in Emfuleni LM in October 2018. However, Rand Water found that this intervention from SANDF had little effect on the water quality flowing into the Vaal River. Rand Water wrote in their 2021 annual report that "[t]he situation is dire, with untreated sewage running in the streets in some suburbs and ending up in the reservoir. Huge banks of sewage sludge have built up in the Loch Vaal area and the confluence of the Kliprivier and Barrage reservoir" (Rand Water, 2021a). The SANDF withdrew from Emfuleni LM in early 2020 (Polity, 2020). In 2018, online and print media reports on the state of the Vaal River alerted the South African Human Rights Commission (SAHRC) to a potential human rights violation in Emfuleni LM. The report into the extent of the human rights violation was released in 2021 and concluded that the sewage problem in Emfuleni is "a crisis and an obvious liability to the State" (South African Human Rights Commission, 2021: pp.8).

Under Section 136 of the Municipal Financial Management Act (MFMA) and Section 139 of the Constitution, the National Council of Provinces determined in 2018 that a Provincial Government intervention was required in Emfuleni LM, without dissolving the Municipal Council. The extent of the intervention was determined to be covered under Section 139 of the MFMA, namely that this was a "financial crisis", with the MFMA setting out the requirements for the intervention by Provincial Government (Parliamentary Monitoring Group, 2018).

In March 2019, the DWS Minister at the time, Gugile Nkwinti, announced the details of the intervention that was agreed to in 2018. The implementation protocol was signed by Departments of Water and Sanitation, Cooperative Governance and Traditional Affairs in Gauteng, Emfuleni Local Municipality, the South African National Defence Force, the Municipal Infrastructure Support Agent (MISA) and the East Rand Water Care Company (ERWAT). The National Treasury injected significant capital through the Regional Bulk Infrastructure Grant. ERWAT was appointed as the implementing agent for this intervention. The Administrator that was appointed in 2018 was also appointed as the Acting City Manager. SALGA described this as a "problematic" situation, as an Administrator is appointed by, and accountable to, the Provincial Executive, whereas an Acting City Manager is appointed by a Municipal Council and is accountable to that Council and must execute the responsibilities given to him/her (Parliamentary Monitoring Group, 2020).

Two years later, however, Rand Water stated that the intervention by "the South African National Defence Force and ERWAT have had little effect" (Rand Water, 2021a: pp.101). The SAHRC (2021) concurred and found that the intervention implemented by ERWAT did not "address the unmanageable situation that [was] occurring in the Emfuleni Municipality" and leads the SAHRC to believe that there remains " extensive non-compliance at all spheres of government with legal frameworks which seek to protect water resources, and to regulate water and sanitation services" (pp.5) and this Constitution Section 139 intervention was unsuccessful. Section 63(8) of the Water Services Act states that "[a]ny expenses incurred or losses suffered by the Minister in taking over any function of a water services authority may be recovered from that water services authority" but the DWS (quoted in SAHRC, 2021) states that there have been challenges recovering the costs of the intervention from Emfuleni LM.

Despite the interventions described above, the SAHRC found that the municipality's wastewater treatment plants are "inoperative and dilapidated" (p.2). The Commission found that Emfuleni LM, as the Water Service Authority, had failed in its constitutional responsibility to provide "human dignity, freedom and security of the person, an environment that is not harmful to health or well-being, not to be deprived of property, health care, food, water and social security, just administrative action and the rights of children to be protected from maltreatment and degradation" (p.3). Notably, the municipality never disputed that it was ultimately responsible for water services in the municipality.

The SAHRC also found that the municipality had contravened the National Water Act (NWA) and the National Environmental Management Act (NEMA), and although the extant legal framework makes provisions for the accountability of the different parties, and mechanisms to ensure that the accountability is upheld, the Commission found that the Department of Water and Sanitation (DWS) and the Department of Environment Forestry and Fisheries (DEFF) had not been able to hold the Municipality accountable for causing sewage pollution as required in terms of Section 19 of the NWA and Section 28(2) of NEMA over a "number of years" (p.3). The Commission stated that this does not "instil confidence in the legislation…meant to prevent degradation of wastewater systems and ensure water and wastewater service delivery and legislation such as the NWA, NEMA and MFMA, which enable accountability, have effectively applied" (pp.3-4).

The Section 139(1)(b) and (5) of the Constitution interventions were extended in 2020 as the NCOP determined that there had been a lack of progress (Parliamentary Monitoring Group, 2020; Department of Cooperative Governance and Traditional Affairs, 2022). A new Administrator, Mr Willy Bila, who is also a Deputy-Director General at Gauteng CoGTA, was appointed in June 2020 for a period of one year, but was replaced in December 2020 by a new Administrator, Mr Gilberto Martins. Mr Martins was previously the Administrator for the City of Tshwane Metropolitan Municipality (EfC, 2021). Mr Lucky Leseane was appointed in February 2020 as Municipal Manager and is still in place at the time of writing in September 2022.

The SAHRC (2021) recommended that interventions in line with section 139(7) of the Constitution, Section 63 of the Water Services Act and Sections 19 and 63 of the NWA were appropriate in the case of Emfuleni LM (SAHRC, 2021 pp. 9). Rand Water was appointed by the Department of Water and Sanitation as the Implementing Agent for the new intervention Constitutional Section 139 intervention in July 2021 for a period of three years. The intervention has five objectives (Department of Water and Sanitation, 2022b):

- Revitalisation and refurbishment of the WWTWs to current design capacity.
- Revitalisation and refurbishment of the existing 44 pump stations in the Emfuleni catchments to current design capacity.
- Pipe replacement programme to eliminate pipe burst and pipe collapses.
- Leave sustainable and operational sewage infrastructure, thus preventing future pollution within the Vaal River catchment.
- Implementation of Water Conservation and Water Demand Management (WCWDM), thus creating additional treatment capacity to meet current and short-term future demands.

In January 2022 Rand Water was informed by the Department of Water and Sanitation that contractors appointed by DWS would be managed by DWS (Department of Water and Sanitation, 2022b). As the Implementing Agent, Rand Water has taken over the water services function at Emfuleni LM and is listed as the Water Services Provider in the 2021 Green Drop report. Rand Water is undertaking the management, operations and maintenance of water and sanitation infrastructure, the refurbishment and upgrade of the reticulation and bulk water services infrastructure, including water conservation and demand management and capacity building of Metsi-a-Lekoa (Rand Water, 2021a pp.24). The SAHRC recommended that the National Government should go further than the current Section 139 intervention, and that "all departments of the

Municipality, save for ones the Provincial and National Government can show is operating adequately, be taken over by National Government" (pp.9). The extent to which this has been implemented is unknown.

Numerous factors were presented to the SAHRC (2021) as contributors to the poor state of water services in Emfuleni LM, including a lack of skills, theft, vandalism, lack of suitable planning and cost containment challenges. Contracts to undertake infrastructure upgrades in Emfuleni LM have been awarded, but construction has been frequently halted by local business forums, also known as the 'construction mafia'. The SAHRC also found that the municipal processes followed in contracting with service providers, the choices made in the appointment of appropriate service providers, and the actual delivery by such service providers posed serious risks to Emfuleni LM (2021). In addition, the SAHRC found that even where there was evidence that a contract was not upheld by a contractor, there was no evidence that the municipality had withheld payment, even though there is a legal provision and common law precedent for this (SAHRC, 2021).

DISCUSSION ON WSA PERFORMANCE AND THE IMPACT OF CONTEXTUAL AND GOVERNANCE FACTORS

Major challenges facing the WSA

Institutional

A respondent indicated that the staff at the municipality know what is needed of them and that are technically able to perform the work, however, the institutional system in which they are operating is constraining their ability to perform the work. Procurement and bureaucratic systems were given as two examples of the constraints on municipal employees, as well as an institutional culture of non-performance (Interviewee).

The municipality was also failed by the supporting institutions, Gauteng government, national government and the national Department of Water and Sanitation. These institutions have been unable to intervene successfully.

Governance

The evidence suggests that there has been extensive political interference in technocratic decision-making processes. The political leadership of the municipality (and perhaps of the intervening institutions) have not been able to address the governance failures of the municipality, which are arguably the root cause of the water services failures in the municipality. Turnover of senior leadership has also meant a lack of stewardship for water services.

Regulatory

The municipality is operating under that same regulatory conditions that other municipalities of the same type are operating under and are experiencing similar challenges with the regulations. A particular challenge to the municipality are the supply chain management regulations. These have meant that the municipality has, at times, appointed service providers who are not able to perform the work to the required standard.

Financial

The low levels of own source revenue and declining payment rates has severely constrained the municipality's ability to fund service delivery, and the capital expenditure required to ensure the sustainability of the existing eservices (through rehabilitation and renewal). Expenditure on maintenance is also a victim of declining revenue, which further reduces the municipality's ability to provide adequate services.

WSA successes

There have been some successes for Emfuleni LM. Some projects that have historically been stuck have recently become unstuck. An online platform for capital project management has allowed the municipality to

better manage its capital programme, and a drone programme has allowed for better managing of capital projects. The reason given for these successes is largely due to political will (Interviewee). There have also been slight improvements in the municipality's financial position, although the sustainability of these improvements is not yet evident.

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WSA REVIEW: JOE GQABI CASE STUDY

BACKGROUND TO THE WSA

Joe Gqabi District Municipality – DC14 (JGDM) – is situated in the North of the Eastern Cape. In 2019, there was an estimated population of 387,149 people. The district covers an area of 25,823 km^2, thus with a density of 135 people per km^2, although this varies significantly between different part of the municipality. From inception in 2001 The Municipality was known as “Ukhahlamba District Municipality”. The name was changed to Joe Gqabi DM in February 2010.

Table 10: Joe Gqabi District and Local Municipalities

Initially, the District consisted of 4 Local municipalities (LMs):

Maletswai (MLM)	- Seat of government in Aliwal North
Gariep (GLM)	- Seat of government in Burgersdorp
Senqu (SLM)	- Seat of government in Lady Grey
Elundini (ELM)	- Seat of government in Nqanqarhu (formerly Maclear)

Following the 2016 local government elections, a demarcation change was implemented in which Maletswai and Gariep LMs were merged to become “Water Sisulu Local Municipality” (WSLM), with the seat of government in the town of Burgersdorp.

The district now has 3 Local municipalities under their jurisdiction – Walter Sisulu, Senqu and Elundini:

11: Distribution of Households by Type of Settlement (census 2011)

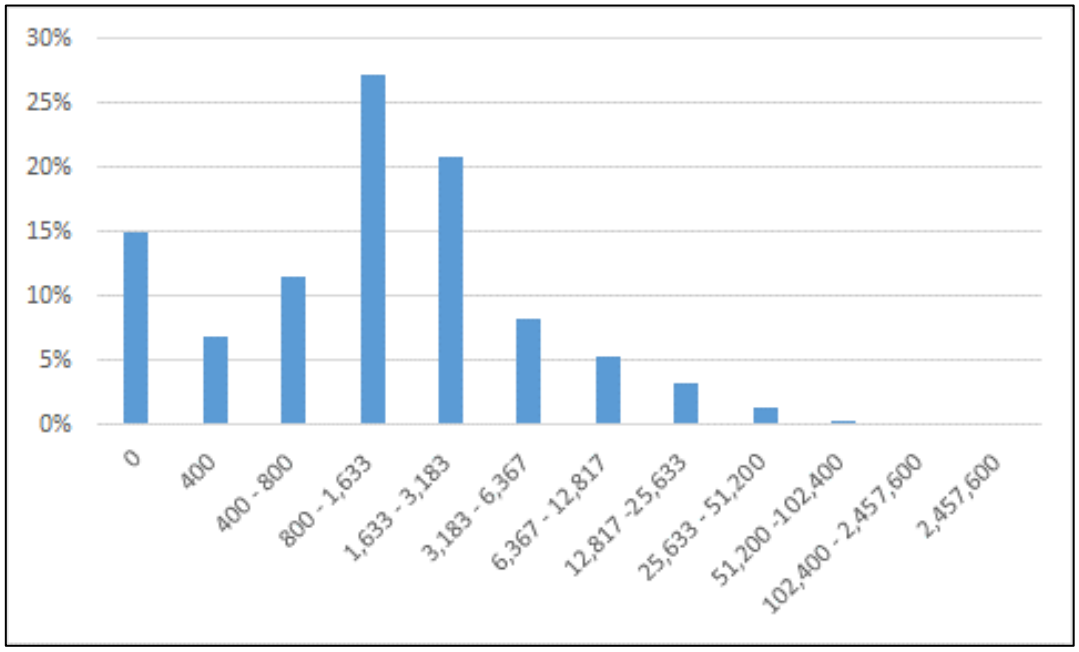
Local Municipality	Urban Households	Farm Households	Traditional Household	Comment
Walter Sisulu	19,421	2,453	0	Mostly farm land and small towns.
Senqu	6,257	1,818	29,970	Farm land, small towns and former homeland traditional settlement in the north-east.
Elundini	11,682	759	25,413	Some farm land, small towns and mostly former homeland traditional settlement.

Note – Data for Walter Sisulu LM is a combination of the old Gariep amd Maletswai LMs

Table 1 above clearly illustrates that the majority of households (57%) reside in "traditional" settlement areas. Hence the biggest service delivery challenge is in the areas of the former Transkei homeland. The other significant area of operational challenge is the town of Aliwal North, with approximately 4,000 households (2011).

Most households within the district are not well off, with an average household income of just R14 600 per annum. From figure 2 below it is evident that around 60% of households had a monthly income of less than R10,000, as reported by COGTA in 2020.

Table 12: Distribution of Monthly Household Income in Joe Gqabi District (Source: COGTA, 2020)



This would suggest that the same 60% of households would struggle to afford water supply bills anywhere in excess of R25-00 per month (Affordability taken to be 3% of household income – generally accepted WHO/WB guideline).

In the areas under the jurisdiction of the Joe Gqabi DM water services (water supply and sanitation) are provided directly by the district municipality. Hence, they perform the roles of both Water Services Authority (WSA) and Water Services Provider WSP). In their role as WSA, JGDM is the lawful owner of all water services infrastructure and hence they are also responsible for the implementation of all capital works. In support of this role JGDM do receive substantial support from the national fiscus to assist them in financing the construction

of new infrastructure (capital grants – usually conditional) and operation and maintenance of existing works (O&M subsidy – unconditional Equitable Share).

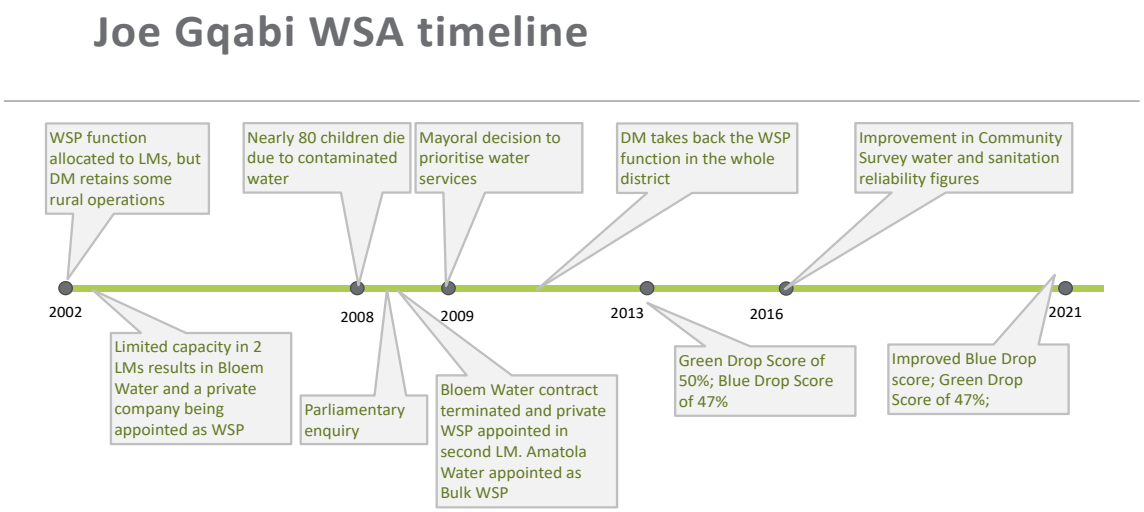
Prior to 1994 water services were provided by the Transkei Homeland Government in the majority of the area now under Elundini LM, and some parts of Senqu LM. In the Western part of the district service provision was managed by the individual town councils, under the Cape Administration of the former Republic of South Africa. After 1994 water services were provided by the Transitional Local Government bodies (Transitional Local Councils and Transitional Rural Councils) until 2003 when the enactment of the "Powers and Functions" of local government allocated the role of WSA to the (then) Ukhahlamba District Municipality. (IDP, 2004/5)7 Following this, the District Municipality delegated the role of Water Service Provider (WSP) to the 4 LMs within the district. This decision was taken consequent to a "Section 78 Study", and effectively resulted in the local authorities continuing in the role they had been playing since 1994. However, this section 78 may have been effectively a "rubber stamp" on an arrangement that had already been decided on politically.

A shocking incident occurred during the first three months of 2008 that significantly influenced decisions on how water services should be provided. A 112% increase in child mortality was noticed (compared to figures for 2007). Investigation of these "baby deaths" soon identified the poor-quality water being consumed as the cause. The public and political awareness of this gave rise to the leadership (political and management) of JGDM being called to account in parliament. As a result of this, there was a recognition that water services should be the core business of JGDM and that when service provision was delegated, the DM had no direct control of service delivery outcomes. All this while they still carried full responsibility and accountability. Due to this, a decision was taken to perform the WSP function internally by JGDM.

This decision was supported by the outcome of a further "Section 78" study. The four municipalities (JGDM, MLM, GLM, SLM and ELM) were all engaged in a process of gradual handover of the service provision roles. Since this decision in 2008/9, JGDM has acted as both WSA and WSP for all areas in the (now) 3 Local Municipalities (WSLM, SLM, ELM) under their jurisdiction.

The timeline shown in the figure below presents an overview of the significant events that have taken place in JGDM. Some of which have been highlighted above and are further discussed in the sections that follow.

Table 13: Joe Gqabi WSA timeline: 2002 to 2021



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WSA SERVICE DELIVERY PERFORMANCE

Water access changes: 2011-2016[8]

The number of households in the district is estimated to have decreased from 97,769 in 2011 to 95,193 in 2016. It is anticipated that this decrease in population will continue (to be confirmed by 2021 Census).

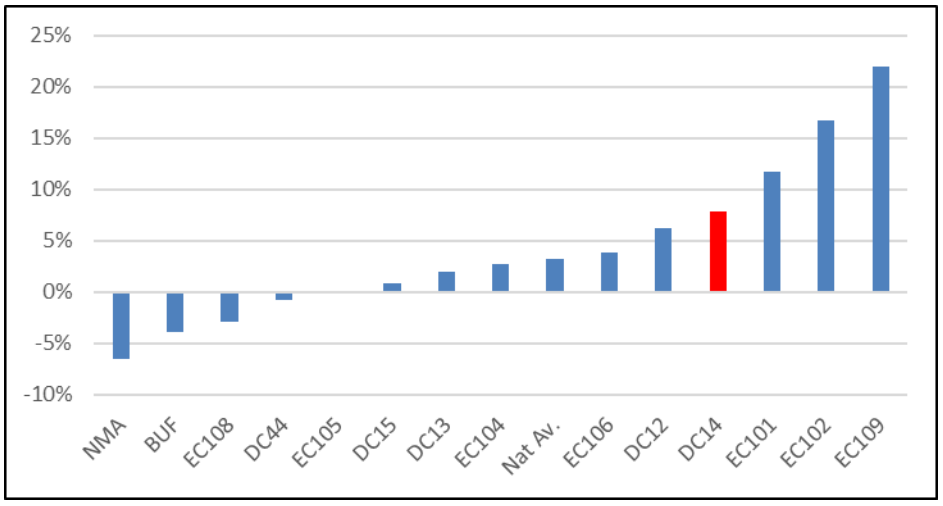
During the RDP programme (1994 to early 2000s) access to water was defined as a supply point within two hundred metres of the household. By 2016, DWS had adopted a new definition for an acceptable level of service. From this decision, those with water in their homes, or at least in their yards are now counted as "served". Whereas those who have to walk to collect water are counted as "underserved". Table 2 shows the progress with the roll-out of water service in JGDM from 2011 to 2016.

Table 14: Changes to Access to On-Site Water Supply in JGDM from 2011 to 2016

IN-HOUSE OR YARD CONNECTION = "SERVED"	Census 2011		Comm Survey 2016	
Served (in-dwelling, in-yard and =< 200m)	60,390	62%	63,333	67%
Underserved (>200m from tap)	12,021	12%	9,374	10%
No Access	25,358	26%	22,485	24%
Grand Total	**97,769**	**100%**	**95,193**	**100%**

JGDM has demonstrated good progress in increasing the number of homes served by 2,943 (5%) and reducing the number of unserved households by 2,873, being 24% of the total. This has resulted in JGDM placing 4th out of 15 Eastern Cape municipalities in the eradication of service delivery backlogs. As illustrated in figure 3 below, the performance of JGDM is also far above the national average.

Table 15: Changes in water supply service levels, 2011 to 2016



It was further reported in interviews with members of the management team that the roll-out of infrastructure has continued apace for the period 2016-2021, and it is expected that good progress and further improvement will once again be captured and reported in the census 2021 report.

Changes in sanitation access: 2011-2021

From 2011 to 2016 the number of homes with flush toilets connected to sewers increased by just 2,629. However, the number of households reliant on "bucket toilets" decreased by almost half, to only 807. The roll-out of sanitation services in rural areas through the installation of VIPs resulted in an almost 50% increase from the 2011 figure of 20,571 to 29,586 in 2016.

[8] Data drawn from the DWS information tool based on the Community Survey, 2016

Table 16: Changes in Sanitation Service Levels at JGDM, 2011 to 2016

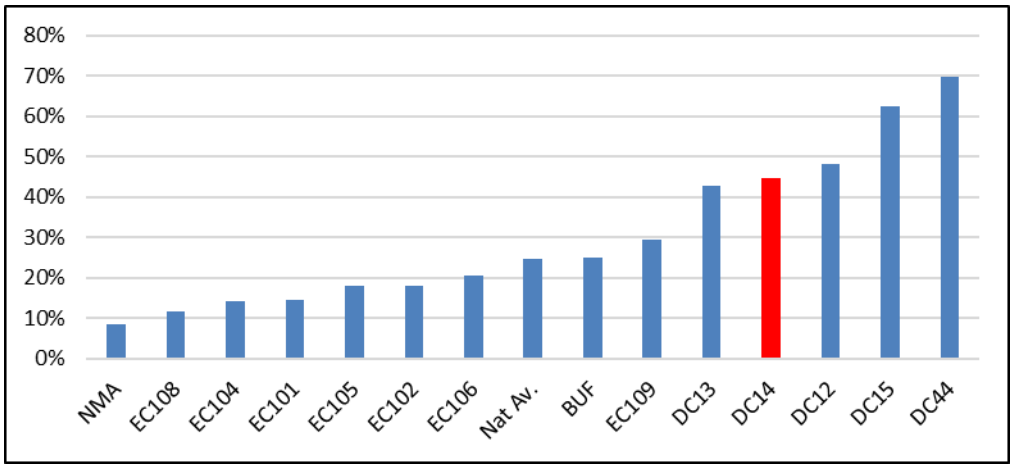
Level of sanitation service	Census 2011		Comm Survey 2016	
Flush toilet (sewered)	23,308	24%	25,937	27%
Flush Toilet (septic tank)	2,882	3%	4,648	5%
VIP	20,571	21%	29,586	31%
Ecological toilet	3,516	4%	2,514	3%
Chemical toilet			9,481	10%
Pit latrine	25,726	26%	15,491	16%
Bucket toilet (municipality)	1,727	2%	407	0%
Bucket toilet (household)			400	0%
No access	16,738	17%	5,001	5%
Toilet Other	3,318	3%	1,829	2%
Grand Total	97,786	100%	95,293	100%

However, simply having a toilet does not guarantee that sanitation is safely managed. At present very few municipalities in South Africa have any policy, budget or programmes for adequate faecal sludge management, in this regard JGDM is no exception.

The DWS and international (UNICEF/WHO) definition for acceptable or “improved” sanitation is a flush toilet, VIP toilet or ecological toilet, which is not shared with other families. By this definition 50,277 (51%) households in JGDM had an acceptable sanitation service in 2011, and by 2016 this number had risen to 72,165 (76%). The number of households with no access to sanitation facilities decreased from 16,738 (17%) to just 5,001 (5%).

As with water supply, JGDM has performed well and placed fourth out of fifteen municipalities in the Eastern Cape province in the eradication of sanitation service delivery backlogs. Their performance in eradicating sanitation service backlogs is also far above the national average.

Table 17: Percent Increase in Households with Access to Adequate Sanitation in the Eastern Cape



No doubt the continued roll-out of capital spending on improving sanitation services by JGDM during the period 2016-2021 will be measured as an even lower proportion of unserved households when the results of the 2021 census are made available.

Water Supply Interruptions: 2011-2016

In the 2011, Census respondents were asked if their water services were subject to interruptions, and whether those interruptions lasted for longer than two days. From the Census 2011 data we see that for JGDM as a whole, 62% of households reported that their water supply had been interrupted and that for 84% of such interruptions, it took longer than 2 days for the service to be reinstated. Significant variation was also observed

between the operational areas (LM boundaries), with the poorest performance being recorded in the area of the Senqu LM.

Table 18: Interruptions to Water Supply

	Census 2011		Comm Survey 2016	
	Interuptions	> 2 days to Repair	Interuptions	>14 days over 3 mths
JGDM	62%	84%	61%	30%
Elundini LM	65%	80%	60%	24%
Senqu LM	76%	91%	56%	48%
Maletswai LM	35%	60%	69%	6%
Gariep LM	82%	82%	74%	23%

Note: Maletswai LM and Gariep LM consolidated into Walter Sisulu LM in 2018

The data from the 2016 Community Survey indicate that the percentage of households experiencing interruptions to water supply did not change by much for JGDM (61%), but the spread of those operational challenges did change from the 2011 figures. Significantly, the number of interruptions in Senqu LM dropped by 20%, and in Maletswai LM there was an almost doubling of reported interruptions.
The method of measurement of length of interruption did change from “2-days to repair” in the 2011 Census, to “a 14-day interruption over a 3-month period” in the 2016 Community Survey. The figures in Table 4 illustrate the unequal operational outcomes across the district, with the greatest number of lengthy interruptions being once again recorded in Senqu LM.

Using the two criteria discussed above to define an unstable water supply, the DWS calculates that only 54.7% of respondents in JGDM indicated that their water supply was stable. When the data is further analysed the reliability of the water supply for those with piped water in the yard or in the home is found to be only 20.1%. Looking at all those supplied with water to within the RDP standard (60,390 homes in 2011) the reliability increased to 29.4%.

Using the criteria from the 2016 Community Survey to define an unstable water supply, 69.4% of respondents in JGDM indicated that their water supply was stable, a 14.7% increase from 2011. Further analysis indicates the reliability of the water supply for those with piped water in the yard or in the home to be 31.3%, an improvement of 11.2%. Considering all those supplied with water to within the RDP standard (63,333 homes in 2016) the reliability increases to 46.2%; this being a 16.8% increase from 2011.

Comparing the performance of JGDM with other Districts in the Eastern Cape Province, better performance is only achieved in Sara Baartman DM (Previously known as Cacadu District Municipality – CDM), which, significantly, is made of several smaller LMs that are WSAs, serving mostly small towns within large areas of farmland.

Table 19: Reliability of Water Services as measured in the Community Survey – 2016

WSA (Comm Sur 2016	RECEIVING STABLE WATER SUPPLY	RELIABLE ACCESS TO WATER SUPPLY (new definition)	RELIABLE ACCESS TO RDP WATER
JGDM	69%	31%	46%
CDM	85%	75%	79%
CHDM	63%	39%	50%
ADM	52%	13%	29%
ANDM	43%	7%	15%
ORT	35%	6%	10%

This good performance and the significant improvements in the reliability of service from 2011 to 2016 would indicate that the takeover of services from the LMs by JGDM has yielded positive results.

Water quality – Blue Drop score: 2013-2021

Water Services in JGDM are delivered through twenty drinking water supply systems. Some of these being discrete towns, while other are groups of smaller stand-alone systems, which are mostly in rural areas.

These water treatment plants and water distribution systems were assessed under the Blue Drop Progress Report process in 2013. The outcome was an aggregate score of 47.06% (a higher score indicates better performance). Notably the score achieved by JGDM was far short of the score of 90% required for award of a "Blue Drop". In the assessment, seventeen systems showed improvement, while there was a decline in performance in 5.

Although direct comparison between the 2013 scores, and a repeat of the assessments in 2021, is not possible due to changes in the reporting and scoring mechanisms, the Blue Drop progress report for 2022 indicates that, of the twenty systems assessed, 14 were in the low-risk category. A medium risk rating was assigned to one system, and three systems (all rural), were deemed to be high risk. Also, two of the systems did not have information available to enable an effective assessment. Of the 20 systems it was possible to assess the capacity of supply at 14. In all of these cases the systems were found to be operating within their design capacity. The microbiological quality of water was found to be unacceptable at 7 of the 20 systems.

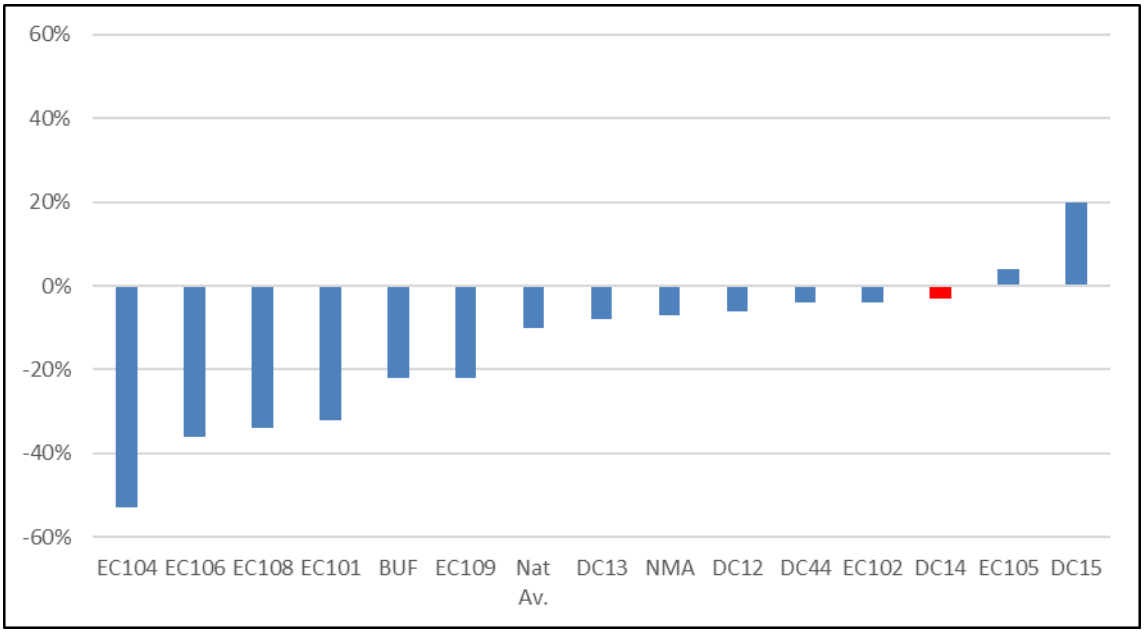
The weighted Blue Drop Risk Rating for JGDM was 35% (a lower score indicating better performance).

Wastewater performance – Green Drop score: 2013-2021

In the 2022 Green Drop Assessment 15 waste water systems were reported on. None of these systems qualified for the award of a "Green Drop," which requires a score in excess of 90%. The highest score achieved was at Lady Grey (70%) and the lowest score was 35%, at Burgersdorp. The overall score for JGDM was 47%, this being a slight decline from the previous Green Drop assessment in 2013 (50%), but still a significant improvement on the 2011 score (22%).

This score of 47% places JGDM 3rd place amongst the "most improved" WSAs in the Eastern Cape Province, and well above the national average improvement score.

Table 20: Percent Change in Composite Green Drop score, 2013-2021



Of the twelve systems that reported on capacity utilisation, 6 reported that the design capacity was at, or exceeded, the design limits. Importantly the two largest plants, one at Aliwal North (5.5 Ml/d) and the other at Burgersdorp (2.5 Ml/d) are significantly overloaded. Aliwal North is operating at 138% of design capacity while

Burgersdorp is running at 224% of design. These two plants alone represent 42% of the total design treatment capacity of JGDM.

Also notable in the Green Drop report is the apparent under-utilisation of Design capacity at the plants in Maclear (3%) and Mt Fletcher (4%). This probably points to failures within the sewer collection system, and that much of the wastewater produced in these towns never in fact makes it to the treatment plants but is rather "spilled" en-route.

Non-revenue water

In the financial statements for the year ending June 2019, it was reported that the average cost of water produced was R10.23 per kilolitre, and that the total financial effect of water losses was R11,287,465. In 2020 the average cost was reported as having increased to R17.75 per kilolitre and the Rand value of losses had escalated to R155,140,520. This made up for R110,050,781 of raw water loss and R45,089,739 for treated water.

While the significant increase in cost per kilolitre of 74%, and the full financial impact of the losses going up by almost 14 times are significant, these large increases are probably indicative of changes in the method of calculation and estimates of flows.

In the following reports there was no indication of effective measurement of non-revenue water by JGDM:

- *National Water Service Benchmarking Report (2007)*
- *Municipal Water Services Performance Assessment (RPMS – 2010)*
- *Municipal Water Services Performance Assessment (RPMS – 2012)*
- *The state of Non-Revenue Water in South Africa (2012)*
- *DWS Non-Revenue Water webpage indicates there is no data for JGDM*

It must be presumed that there remains a challenge regarding adequate metering of system input volumes and the amount of water consumed.

While such metering may appear to be a relatively simple operational matter, it should be kept in mind that WSAs serving large rural areas with many stand-alone schemes face a wide range of logistical challenges in executing mundane day-to-day operation and maintenance tasks. In this regard, metering is no different and the investment and operational tasks required to create a water balance is not a trivial matter. This is particularly true where maintenance budgets are constrained and there are many more pressing demands on the funds that are available. This challenge has indeed been observed to be true in many other Category C2 WSAs.

WSA FINANCIAL PERFORMANCE

Audit performance

JGDM was established after the 2001 local government elections and the first year for which financial records are available is 2002/2003. Thereafter, there are financial records up to 2022.

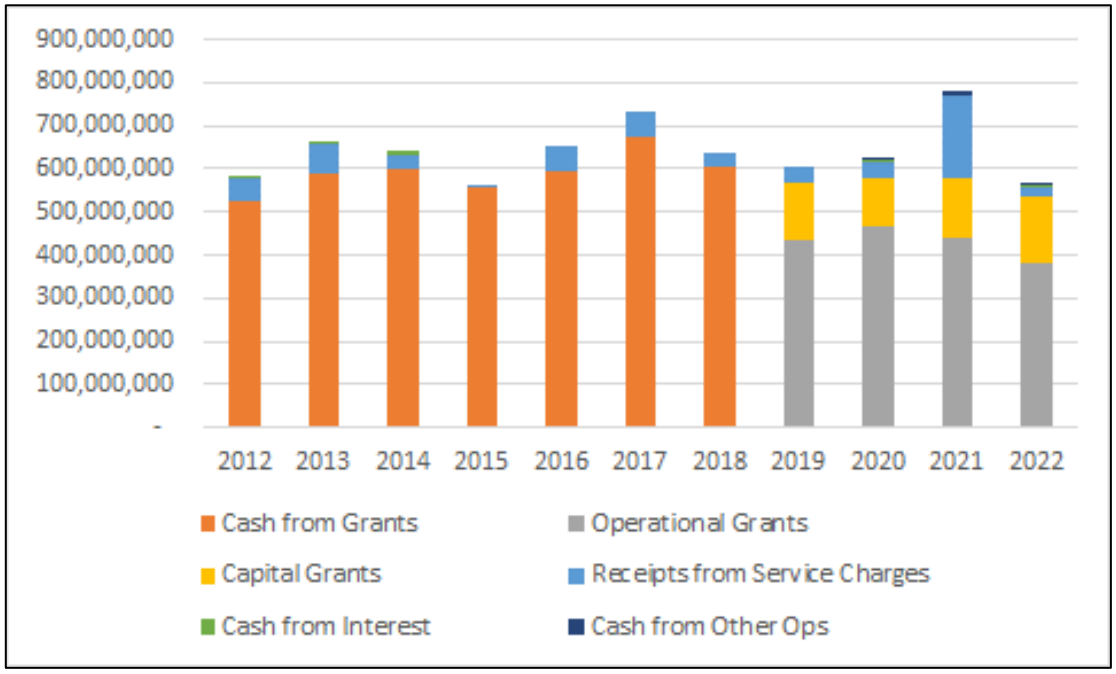
In an interview with the Technical Director of JGDM he stated that "JGDM prides themselves on being a clean audit municipality". The Auditor General report for 2021 indicates that since the 2016/17 financial year, JGDM has indeed received unqualified audits, 3 with findings and two without. Of the 39 municipalities in the Eastern Cape, JGDM placed second in aggregate audit outcomes over the period FY7-FY21. The only better performing municipality was Senqu LM, a municipality within the jurisdiction of JGDM.

Of the 21 DMs that are WSAs JGDM shared the best audit outcomes over 5 years with Capricorn and King Cetshwayo DMs. The aggregate score of these three municipalities was 8 (5 being the best possible score), whereas the average for Category C2 Municipalities was 15.

Sources of Income

JGDM is a grant dependent municipality. In the 2022 financial year their cash flow statement indicates that the cash income to the municipality totalled R560,822,855. Of this R531,056,865 (95%) was received by way of grants/subsidies from the national fiscus.

Table 21: Total Cash Received by JGDM (all figures in 2022 equivalent values)



Apart from the increase shown in 2021, it is noticeable that the total amount of funding available to JGDM has been on a downward trend since 2017.

Until 2018, the operational and capital grants were not reported separately in the financial statements, but it is clear from Table 6 that from 2019 the capital grant has increased by 12%, and that the operational grant has decreased by about the same percentage. In fact, there has been a decrease of 18% from 2019, the year in which the highest operational grant was available.

Table 22: Recent Changes to Subsidies Received by JGDM

Year	Operational Grants		Capital Grants	
	ZAR (2022 equivalent)	Yr on Yr Change	ZAR (2022	Yr on Yr Change
2019	433,003,293	100%	136,259,823	100%
2020	464,604,074	107%	111,940,679	82%
2021	441,377,113	102%	138,097,910	101%
2022	381,514,463	88%	153,241,091	112%

The reality is that JGDM is largely grant dependent, and due to low levels of household income, the DM has limited possibility of increasing tariff income to make a material difference to overall funding available. Hence, such a reduction in operational grants will have a serious impact on the ability of the municipality to provide services.

Tariff Income

There is a large discrepancy between what the annual financial statements of JGDM reflect as revenue in their income and expenditure statement, and what they actually receive as cash payments for services delivered. Considering the period 2013-2022, for which data are available, we see that the average billing in the period is R105,136,390 per annum whereas the average amount receipted is R54,655,738. Stated otherwise, only 52% of what is billed has been received as cash payments from consumers.

Table 23: Billing and Cash Received from Service Provision

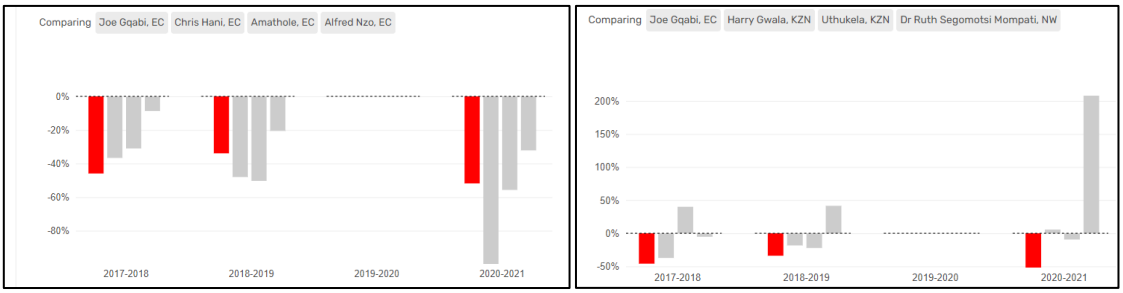
Year	Revenue from Services (ZAR / yr)	Receipts from Service Charges (ZAR / yr)	Cash Recieved / Bills Issued (percent)
2013	39,697,369	69,019,473	174%
2014	56,863,760	31,718,173	56%
2015	108,633,594	6,995,759	6%
2016	125,721,103	54,904,445	44%
2017	107,004,827	59,442,772	56%
2018	85,613,374	36,120,624	42%
2019	133,042,749	33,517,542	25%
2020	127,326,645	40,051,347	31%
2021	162,323,390	191,491,663	118%
2021		23,295,582	
Average	**105,136,312**	**54,655,738**	**52%**

This non-payment of bills is also reflected in the ratio of the value of debtors less than 90 days in arrears (R69,396,915) to those in excess of 90 days in arrears (R369,921,249). For JGDM this ratio is 18%, as stated in the 2022 financial statements.

Spending of Capital Budget

Significant underspending of capital grants by JGDM is indicated in data from National Treasury. Within the Eastern Cape Province JGDM is average when compared with peers. However, nationally they appear to be performing far below the norm.

Table 24 a & b: Underspending of Capital Budgets (from municipal money website)



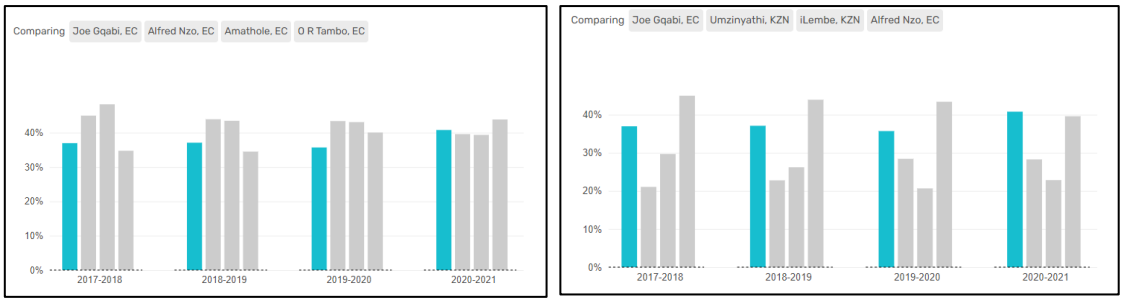
The technical director of JGDM pointed out that it can be seen in the financial statements that the municipality does fully utilise their Municipal Infrastructure Grant (MIG) and Water Services Infrastructure Grant (WSIG) each year. Whereas the challenge they face is in spending the Regional Bulk Infrastructure Grant (RBIG – a conditional grant). The challenge being that DWS allocates large RBIG budgets to the municipality each year, but they then delay the approval of projects. These delays then result in the funds being “taken back”.

Discussions with the technical director of JGDM confirmed that the same scenario will play out in the current year (FY23). He noted that there is a R20 million allocation in the Division of Revenue Act (DORA) for JGDM, but DWS still have not approved that the project may proceed. He noted that DWS admits that the fault is with their own processes. It was further noted that, at this late stage, in the financial year there is still no approval. He stated that, “the municipality would still have to implement a tender process before construction can even begin. There is no way we can spend R20 million by the end of June 2023”.

Staff wages and salaries

Data from National Treasury indicate that salaries at JGDM have remained stable at around 40% of total spending. This figure compares favourably with both provincial and national peers (Cat C2 DMs).

Table 25 a & b: Staff Salaries and Wages as a Percentage of operating expenditure (from municipal money website)



The average cost of staff, measured in 2019 rands, was R260,734, which is in fact a 17% decrease from R311,387, over the past 5 years. In the same period the total number of staff per 1,000 customers has grown from 1.73 to 2.35.

These figures indicate that JGDM is performing at levels within the norms for Category C2 municipalities across the country.

GOVERNANCE HISTORY

The ANC has been the dominant political party in Joe Gqabi DM since 1994. Recent results in local government elections do however suggest some shift in voter sentiment.

Table 26: Percentage of Vote for the ANC in Local Government Elections

Local Municipality	2016	2021
Walter Sisulu	67%	56%
Senqu	68%	73%
Elundini	84%	80%

This political stability, and indeed stability within the leadership of the ruling party, has been noted as a key component of the sustained focus of JGDM on providing good water services, and the good results they have achieved.

Since 1994, neither JGDM nor the associated LMs have been placed under administration or subject to any other sanction from provincial or national government. In fact, the stability of political leadership at JGDM has been cited as the reason for their success and was confirmed in interviews conducted for this case study.
The stability of political leadership has been mirrored in the long service of much of the senior management team, with several people having 15 years or more of service with the municipality. This is also true of senior managers employed on contracts (section 57 employees).

Of the senior management team, only the position of Chief Financial Officer (CFO) has had a significant turnover of appointees. In the interviews it was commented on how important it is to “have the CFO on board” to allow the municipality to operate effectively. Presumably, the stability of political leadership and other senior management personnel enabled a situation where CFOs soon understood the mission and modus-operandi of JGDM.

As mentioned above, the “Baby Deaths” incident and the ramifications there-of, including the calling of politicians and management to account in Parliament, did lead to very serious consideration of the roles and responsibilities of municipalities (LMs and DM). The consideration of roles, responsibilities, and resources available, and what it means to be a WSA and a WSP resulted in JGDM deciding to take on the WSP role internally and recognising water services as their core business. This has remained the focus of JGDM up to today.

DISCUSSION ON WSA PERFORMANCE AND THE IMPACT OF CONTEXTUAL AND GOVERNANCE FACTORS

JGDM is widely reported as being a better performing WSAs across all the measures reported here. This is supported by widespread anecdotal reports that the municipality is indeed doing a better job than others in their peer group of Category C2 District Municipalities.

The focus on performance in the delivery of water services is a product of the political and management decisions to prioritise this work, which emanated as a result of the “baby deaths” incident, and the associated enquiry by various government departments, followed by the introspection of political and management leadership.

Following the incident, a very clear message that “water services is our priority” was communicated to the managers of all departments and has been consistently communicated to all staff since that time.

Also key to the performance of the municipality has been the stability in political leadership and the management team over a 15-year period. In fact, such a lengthy period with few significant changes at senior levels is rather unusual in local government where political leaders serve terms aligned to the election cycles and senior managers who are often employed as “section 57” appointees with a 5-year term. It certainly appears to be that a change in personnel after these periods is deemed to be “normal”.

The experience of JGDM is that a sustained message of striving for excellence in water service provision from stable political leadership and a long-serving management team has resulted in a focus on effective service delivery, albeit that they also operate within a context of limited financial resources, and that they are largely grant dependent.

While the performance of JGDM is recognised as being “better than most”, they are not without their challenges. The following items of concern were noted during interviews with the current and former staff of the organisation:

Ageing Infrastructure: Much of the infrastructure in the towns is in excess of 50 years old and the maintenance, upkeep and renewal of this decrepit infrastructure is putting ever increasing pressure on the budgets and human resources of JGDM.

Remote Rural Areas: The water services infrastructure in rural areas is much newer than in the towns, having been mostly installed after 1995. However, the remote location and the fact that there are numerous installations of infrastructure and equipment have created an operational context with significant logistical challenges. In interviews with management of JGDM it was stated that “the rural areas are the challenge. The towns we can handle but the rural areas are very difficult to manage”.

Inadequate Funding: The experience of JGDM is that the funding available to them through tariff collection, operational grants and capital grants is insufficient for them to be able to adequately address the operational challenges they face. The low level of household income mitigates against significant revenue being collected from tariffs, and the feeling is that the O&M subsidy (Equitable Share) is also inadequate for the work associated with ageing infrastructure and the logistical challenges in rural areas.

Staff Skills: Recruiting and retaining mid-level technically skilled people is difficult for organisations located in small remote towns and/or rural areas. The lack of basic amenities is often cited as a reason that young professional people do not want to take up posts in such places. When such professionals do take up posts in such areas it is often as a short-term "stepping stone" to acquire experience to enable employment in more desirable locations.

Planning for service to "modern houses" being built in rural areas: The provision of infrastructure in rural areas has been focussed on providing the so-called RDP level of service (communal standpipes, 200m walking distance and 25 litres per capita per day). It is evident that "modern houses" are now being built in rural areas, and that these residents desire private connections since they often have appliances and facilities such as washing machines, showers, and flushing toilets, which require much more than 25 litres/capita/day. This inevitably leads to an increase in household consumption. In that the definition of a basic level of service was changed in 2012 to – "a yard connection and 60 litres/capita/day", the challenge for the municipality is how to plan for and finance such a steadily rising demand in both new schemes and the upgrading of existing schemes.

While the overall impression is that JGDM is performing better than most, it is important that there is significant room for improvement on a number of operational matters-

- The data collected through the Community Survey 2016 indicates that there is scope for improvement on the reliability of water supply.
- Both the Blue Drop and Green Drop reports indicate gaps in the performance of some systems and treatment works.
- There is a need for improved measurement and monitoring of services, over and above the minimum regulatory requirements. This is essential to inform operational decision making, e.g. metering consumption, monitoring reliability of service, monitoring wastewater spills, and others.
- There is a need to identify what is actually possible in the way of tariff collection from the customer base that the municipality has.

LEARNINGS FOR REVIEW OF WSA MODEL IN SOUTH AFRICA

The experience of JGDM over the almost 20 years that they have been a WSA is interesting in a number of respects. The specific circumstances encountered around the "baby deaths" incident influenced the thinking of political leadership and the management team on how water services should be provided and managed. This resulted in a series of strategies and decisions (water is the priority for JGDM) on how best to ensure that services are adequately delivered and that JGDM fulfils their roles and responsibilities as a WSA. The points made below highlight some of the broader considerations drawn from this case study as they relate to the WSA and WSP arrangements.

- Delegation of the WSP function, and subsequent non-performance by the WSP can give rise to a situation in which the WSA is held accountable but feel that they have no operational control, and therefore cannot effectively implement corrective action. Notably, the change from one arrangement to another between District and Local Municipalities was the product of political negotiations, strategy and decision making. The decision to delegate the WSP function to LMs appears to have been an attempt to share the roles, responsibilities, and benefits (funding) associated with the Equitable Share for O&M of water services between the DMs and LMs. Interestingly the Equitable Share received by DMs does not affect the grading of the municipality in the same way as when it is passed on to the LMs. Reportedly, the LMs can treat the transfer from the DM as "income" and hence their grading goes up, and along with that the salary caps for specific posts increase. Therefore, there are some very direct personal incentives for officials and councillors in the LMs to see such an arrangement put in place. It is also clear that there may not necessarily be broad agreement of officials and councillors on these matters, and contestation could result.
- The special provisions for governance of the relationship between WSAs and WSPs do not add any significant value. A simple arrangement where the relevant local government body (or any other organisation) is mandated to ensure adequate water service and is then free to enter any type of service delivery contract they may require would be less cumbersome. It would also eliminate the

possibility of an additional level of political contestation for control and access to resources. This of course does beg the question on the role of District Municipalities viz Local Municipalities, especially in the case where the district is mandated as the WSA.

- The possibility of covering any significant portion of O&M costs from sales is severely constrained in poorer parts of the country, especially in those areas of traditional settlements that were formerly under the homeland administrations. It is therefore essential that any operating subsidy that is to be applied be aligned to the actual operational challenge. The approach that an equivalent subsidy is applicable for services in urban and remote rural areas should be reviewed.
- Leadership stability is key. In order to inculcate a culture of service delivery excellence, it is necessary that there be a sustained focus on implementing the activities required, along with the allocation of the required resources.
- There must be a recognition that water services are the core business of District Municipalities that are mandated as WSAs. In the case of JGDM (and all other Category C2 Districts) the vast majority of their budget (mostly greater than 80%) is related to water services (CAPEX and OPEX). As the organisational form is that of a municipality, it is not surprising that the organisations will prioritise other aspects of their broader mandates. What is problematic is that many of these other mandates are unfunded and indeed the scale to which they should be pursued may not be tightly regulated. This gives rise to financial resources and management attention being diverted from the core business, which is water services.
- Effective monitoring and reporting are required. Regulatory instruments such as Blue Drop, Green Drop, Audits and submission of Annual Financial Statements are in place and playing an important role in the monitoring of performance. However, there is currently little in the way of measurement of the day-to-day level of service received by customers. This is particularly true of measuring the continuity of service and the time taken to address incidents of service interruption. The only means of measuring these parameters currently is through some of the questions in the Census and Community Survey, which are only conducted every 5-years. The occurrence of spillages of wastewater is also seldom monitored and reported on in any systematic manner.
- Support programmes have had mixed results. Over the years, JGDM has contracted and received support from a number of organisations. A number of water boards have assisted them over the years. In each case, these arrangements were terminated due to limited value being realised from the relationships. Each of the Water Boards was contracted to assist with the challenge of service provision in rural areas. The expectation was that the Water Boards would be able to assist in this regard, but in fact it was found that they also did not have expertise in this area. Other support programmes, such as secondments (e.g. Siyenza Manje), and directly contracted firms added more value as the individuals working with the municipality could be directed to assist more specifically on issues where JGDM deemed support to be necessary.
- Attracting skilled people to work in remote rural areas is a challenge. Over the past 25 years the roll out of infrastructure to address service delivery backlogs has been significant. This is especially true in formerly neglected rural areas. This roll-out of infrastructure of course comes with an ever-growing need for effective operations and maintenance to be in place. Unfortunately, JGDM (and other Category C2 District Municipalities) are not able to easily attract the necessary skilled staff to address this ever-growing O&M challenge. In the case of JGDM they have successfully recruited and retained senior managers, but a lack of mid-level skills continues to hamper them.

CONCLUSION

The delivery of water services in Joe Gqabi District Municipality has been profoundly shaped by the “Baby Deaths” incident in 2008. Prior to this event, the local municipalities were appointed as WSPs by JGDM (the WSA). This arrangement was part of the political arrangements to share roles, responsibilities and resources made soon after the Powers and Functions of Local Government were promulgated in 2003, in which JGDM was mandated as a WSA.

As a result of the “Baby Deaths” JGDM, as the WSA, was called to account both politically and operationally. This gave rise to the acknowledgement that water services where the core business of the municipality and the work of the municipality should be prioritised as such. This message has been part of the ethos of JGDM

since that time. The stability of both the political and management leadership teams enabled the embedding of this understanding of the priority of the municipality within the staff, and the modus operandi of the organisation.

Since then, JGDM has been widely recognised as one of the top performing District Municipalities that is also a WSA. The metrics of performance presented in this case study, and elsewhere, support these observations of good performance. However, there are challenges. As with any WSP the context is not static and there are always areas where improvements can be realised.

As a litmus test of the recognised performance, it is notable that a number of their peers in the Eastern Cape Province have visited and called on JGDM to make presentations for them to see how best they can learn from the experiences of this organization, which, in a remote location, with large service delivery challenges, has become recognised throughout the country as an example of what can be achieved through sustained political and management commitment and focus.

WSA REVIEW: KGETLENGRIVIER CASE STUDY REPORT

BACKGROUND TO THE WSA

Kgetlengrivier Local Municipality (LM) (NW374) serves settlements concentrated around Koster, Derby and Swartruggens, to the west of Rustenburg in the North West Province. In 2016, it had a population of 51 049 according to the Municipal IDP, and the Department of Water and Sanitation (DWS) National Integrated Water Information System (NIWIS) currently shows the population as 66 157. The district covers an area of 3 980.9 km^2 with a density of 12.8 km^2.

The municipality is one of the poorest in the country, and over 70% of the population relies on social grants. Nonetheless there are less than 500 names are on the Indigent Register, indicating limited explicit municipal provision for support to low-income families. (Maphanga, pers.comm. 2022).

Figure 35: Kgetlengrivier Municipality in the North West Province

Source: Municipalities (n.d)

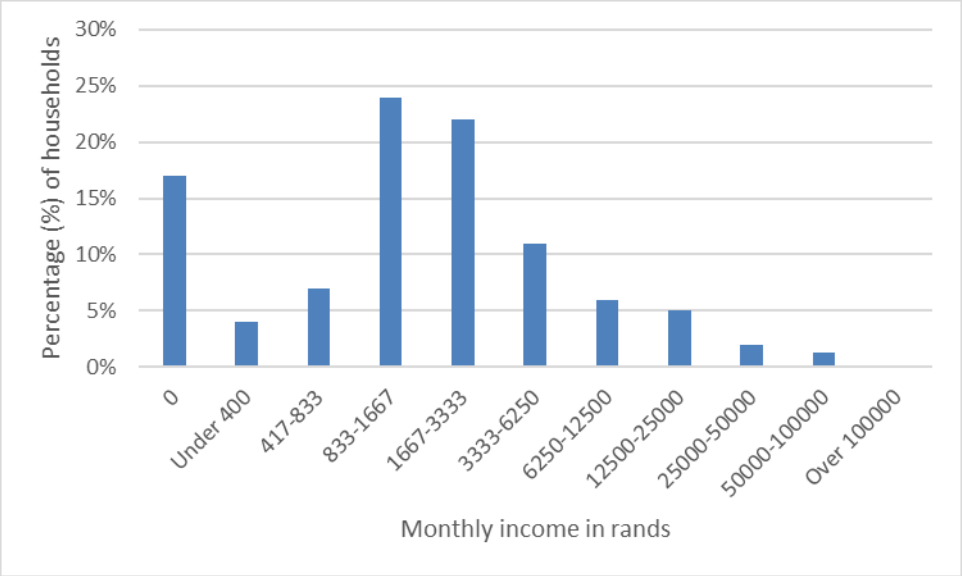


Figure 36: Monthly household income in Kgetlengrivier, 2016

Source: (Wazimap, n.d.)

There have been no demarcation changes since the municipal boundary was established in 1998. The Municipal Demarcation Board (MDB) is currently assessing a boundary redetermination proposal to absorb Kgetlengrivier LM (KLM) into Rustenburg LM.

KLM is both the Water Services Authority (WSA) and Water Services Provider (WSP). KLM relies extensively on support from Magalies Water for bulk water, and for planning and implementing most big water and sanitation capital projects. In 2012 KLM signed a five-year operations and management (O&M) contract with Magalies Water, and in March 2021, KLM appointed Magalies Water as its implementing agent to manage water and wastewater treatment in Koster and Swartruggens. Magalies Water continues in this role, with municipal workers managing reticulation.

Note: No information could be found on Section 78 assessments.

The timeline shown in the figure below presents an overview of the significant events that have taken place over the past fifteen years in KLM. These are discussed in the sections that follow.

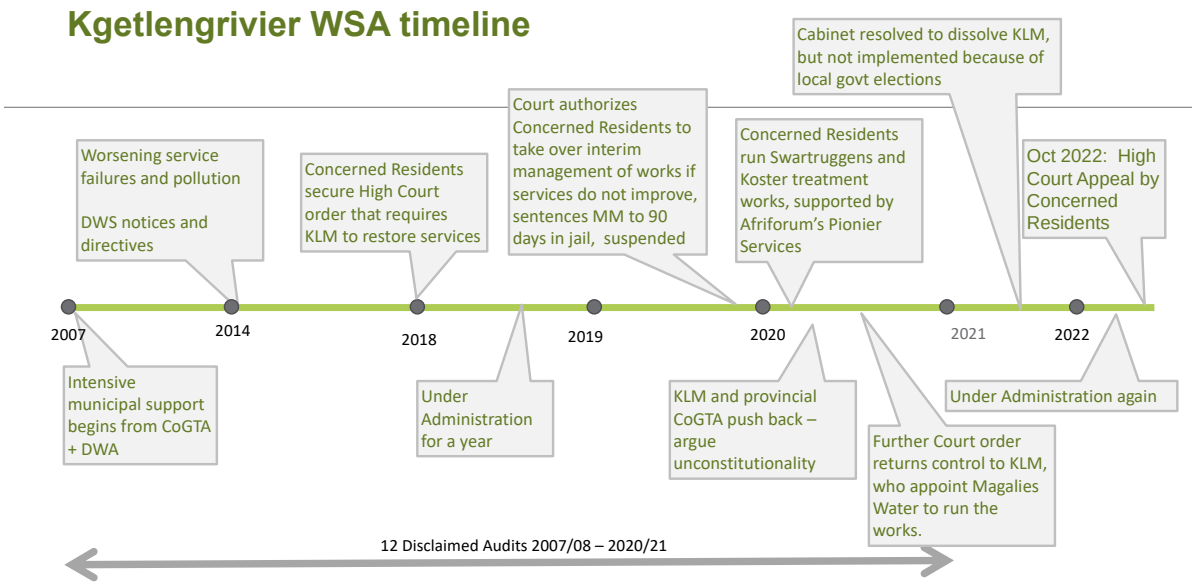


Figure 37: KLM timeline – 2007 to 2022

WSA SERVICE DELIVERY PERFORMANCE

The DWS NIWIS system shows 88,3% water supply coverage in July 2022, against 53% with a reliable supply of water. Note that DWS NIWIS calculates this off a population of 66 157, whereas the municipality uses the 2016 census population figure of 51 049, so some discrepancies in performance reporting is inevitable.

No Water Services Development Plan (WSDP) has been developed or revised since 2010, and it seems that DWS has relaxed its insistence that every WSA should have a comprehensive WSDP which should be reviewed regularly. Consequently, KLM relies at best on infrastructure masterplans developed by Magalies Water, which reflect mainly MW's interests, and ad hoc project planning.

Table 27: Water service levels 2011-2016

Service level	*2016*	*2011*
Flush toilet connected to sewerage	62.5%	51.9%
Piped water inside dwelling	27.7%	34.8%

Source: Municipalities (n.d)

The Community Survey data suggests a decline in access to piped water inside dwellings, but the small sample size compromises the credibility of the data.

Water access changes: 2011-2016

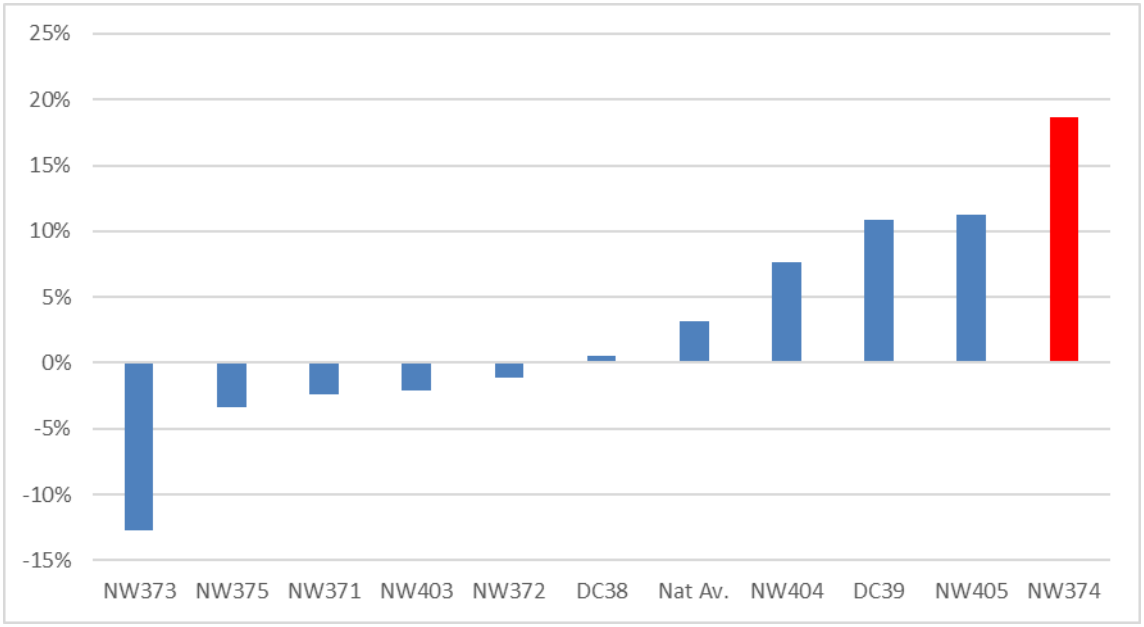


Figure 38: % change in water access in the North West

The graph shows inadequate access to water, which has been a result of worsening service failures and pollution.

Changes in sanitation access: 2011-2016

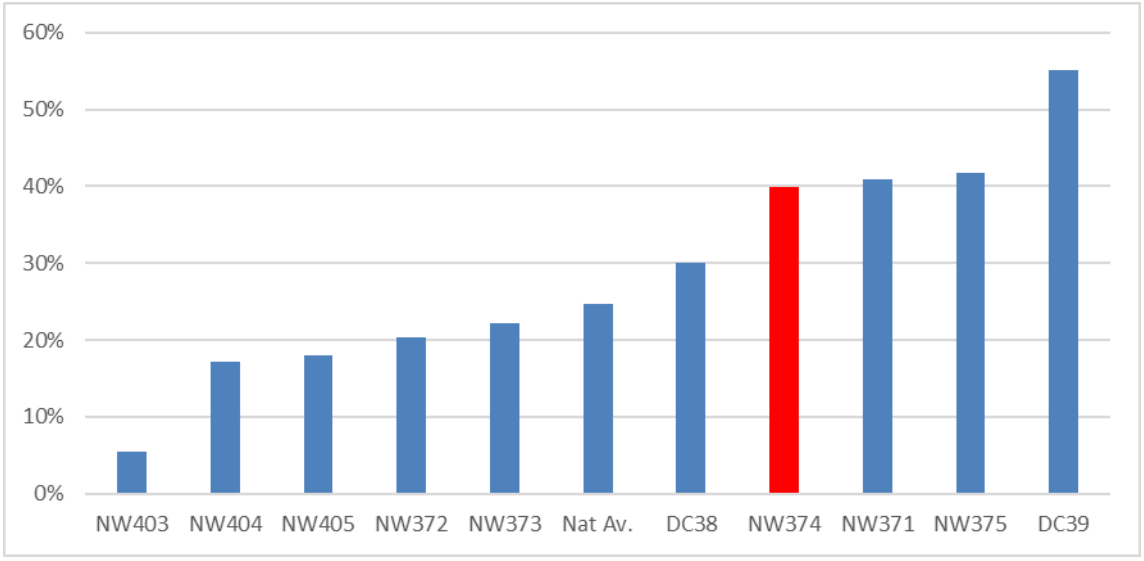


Figure 39: % increase in households with access to adequate sanitation access in the North West

KLM continues to provide a bucket service in some settlements, and its IDP notes there is on-going open defecation.

Water supply interruptions: 2011-2016

No data.

Water quality – Blue Drop score: 2013-2021

Three drinking water supply systems under Kgetlengrivier LM were assessed against Blue Drop criteria in 2021, and all systems were rated as being in the critical-risk rating category.

Municipal BDRR Score: 100%

Assessment Areas	Derby B/H	Koster	Swartruggens
BULK / WSP			
A: Total Design Capacity (Ml/d)	N/I	0.01	N/I
B: % Operational Capacity in terms of design	N/I	N/I	N/I
C1a: % Microbiological Compliance	0%	0%	0%
C1b: % Microbiological Monitoring Compliance	0%	0%	0%
C2a: % Chemical Compliance	0%	0%	0%
C2b: % Chemical Monitoring Compliance	0%	0%	0%
D: % Technical Skills	0%	75%	37.5%
E: % Water Safety Plan Status	0%	0%	0%
%BDRR/BDRR max	100%	93.1%	95.0%

Municipal BDRR Score: 100%

Assessment Areas	Derby B/H	Koster	Swartruggens
BULK / WSP			
A: Total Design Capacity (Ml/d)	N/I	0.01	N/I
B: % Operational Capacity in terms of design	N/I	N/I	N/I
C1a: % Microbiological Compliance	0%	0%	0%
C1b: % Microbiological Monitoring Compliance	0%	0%	0%
C2a: % Chemical Compliance	0%	0%	0%
C2b: % Chemical Monitoring Compliance	0%	0%	0%
D: % Technical Skills	0%	75%	37.5%
E: % Water Safety Plan Status	0%	0%	0%
%BDRR/BDRR max	100%	93.1%	95.0%

Figure 40: Blue Drop scores for the areas of Derby, Koster and Swartruggens

No Water Safety Plans have been developed or adopted, and Derby and Swartruggens were flagged as having "inadequate alignment of supervisors, process controllers and maintenance teams to the regulatory requirements."

Wastewater performance – Green Drop score: 2013-2021

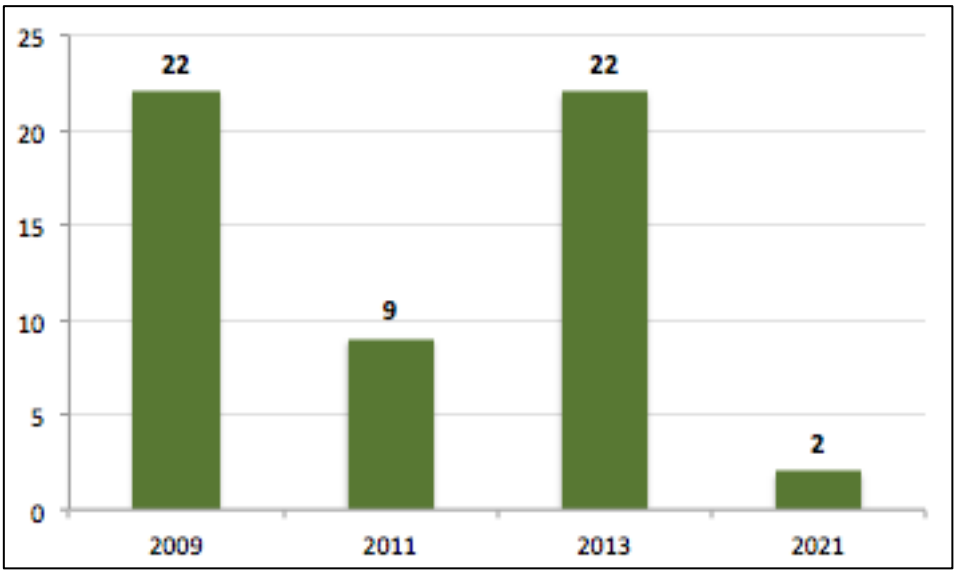


Figure 41: KLM Green Drop scores 2009 to 2021

KLM recorded a Green Drop score of 2% in 2021, which is 20% lower than its previous poor performance as recorded in 2013.

The 2022 Green Drop flagged a critical lack of staffing compliance at KLM's four wastewater treatment plants: no engineers, no technologists, no technicians, and no supervisors or process controllers who met compliance requirements. In 2021 KLM was unable to provide any information on capital budgets, O&M budgets, O&M actual expenditure or current asset values for wastewater plant management. The plants scored between zero and 4% and had Cumulative Risk Ratio percentages showing 'high' and 'critical' levels of risks. Basic documentation was missing, no data was recorded in the IRIS system, and municipal representatives failed to attend the scheduled Green Drop confirmation session.

There has subsequently been some improvement in reporting to IRIS, although substantial deficiencies remain. Current data (September 2022) on the DWS IRIS Dashboard shows extremely poor compliance with requirements, and severely inadequate compliance monitoring.

Kgetlengrivier Local Municipality								
	Microbiological		Chemical		Physical		Operational	
	Comply	Monitoring	Comply	Monitoring	Comply	Monitoring	Comply	Monitoring
Koster	28.6%	>99.9%	0.0%	0.0%	>99.9%	22.0%	0.0%	0.0%
Swartruggens	22.2%	47.0%	81.3%	44.0%	>99.9%	29.0%	0.0%	0.0%
Kgetlengrivier Local Municipality	25.0%	47.0%	81.3%	44.0%	>99.9%	25.0%	0.0%	0.0%

Figure 42: Current effluent quality in KLM

Non-revenue water

Kgetlengrivier LM had a No Drop score of 0% when assessed in 2014. Its 2021 MUSSA report states that NRW is above 50%.

Discussion on major challenges and successes

KLM has a long history of water and sanitation services failures. DWS has flagged it repeatedly for special support since at least 2007, when it was one of 40 municipalities targeted for support by the DWS Water Services Support Unit (WSSU). In 2009, DWS categorized the WSA as being 'at 'crisis level', requiring priority support. Despite these and other interventions, there have been ongoing service failures, with media reports

of residents complaining of going without water for weeks at a time, of dirty water coming from the taps, and of stomach ailments related to the consumption of poorly treated water. There have been ongoing reports of residents being asked to pay R10 per container to receive water from municipal water tankers. While DWS data indicates that about 88% of the population has access to water services infrastructure, much of it is dysfunctional or unreliable. DWS NIWIS data shows that 53% of the population has access to a reliable water supply.

KLM continues to provide a bucket service in some areas, according to its 2021 MUSSA report.
Swartruggens suffers from a severe water resource constraint exacerbated by drought. Phase 3 of the Pilanesberg Bulk Water Supply project is underway, and once completed it will ease the shortages currently experienced in Swartruggens, Koster and Derby. A new activated sludge wastewater treatment works was completed in Swartruggens in 2012, but sewage has allegedly been flowing into the Elands River since at least 2014, allegedly forcing several farmers to stop producing along the river as they could no longer supply produce that met safety requirements.

DWS allocated drought relief funds in 2016 to mitigate severe and extensive drought, but the municipality allegedly spent the funds mainly on salaries. The contractor appointed to repair boreholes and erect a storage reservoir in Mazista as part of drought mitigation was not appointed in line with supply chain requirements, and has still not been paid (Maphanga, pers. Comm). Consequently 10 000-liter water tanks in Mazista stand idle and unconnected. Mazista residents remain reliant on an unreliable tankering service, or alternatively must walk several kilometres to alternative sources.

In Koster, Magalies Water, as the Implementing Agent for the municipality, completed a new R163 million wastewater treatment plant in 2020[9], but almost immediately, it began to malfunction because the municipality lacked competent staff to operate it properly. Residents allege that the municipality simply diverted the flow of raw sewage to the Koster River. "This created large-scale problems as the river runs directly into the municipal dam and from the municipal dam, water is pumped back into the waterworks where it ends up in people's taps," said one KCR spokesperson.[10]

After many years of service interruptions and severe problems with water quality and wastewater quality management, in 2017, the local ratepayers' association secured a court order compelling the municipality to restore effective service provision immediately. The court order yielded improvements for a while, but the gains were not sustained.

In 2019 and 2020 there were public protests in connection with service delivery failures. These protests intensified when municipal workers found that the municipality had not paid over pension or medical aid contributions. Some allegedly committed acts of public violence, including vandalism of some water and wastewater treatment infrastructure.

Following worsening water and sanitation service failures, in December 2020, a group calling itself the Kgetleng Concern Residents (KCR) took the Municipality to court. The North West High Court ruled that the municipality was indeed in breach of its Constitutional obligations for providing potable water sustainably. Unusually, the presiding Judge Gura ordered the imprisonment of the Municipal Manager of KLM for 90 days for failing in his responsibilities as accounting officer, suspended on condition that –

1. The depositing of raw sewage into the Eland and Koster Rivers must be cleared up within ten business days from the date of the order, and the municipality and municipal manager must take all necessary

[9] https://static.pmg.org.za/201016Magalies.pdf. The figure of R141-m is reported widely, but the cost-overrun is far higher

[10]https://www.news24.com/news24/opinions/fridaybriefing/watch-raw-sewage-and-no-water-how-citizens-of-2-north-west-towns-took-charge-of-services-20210218

steps to ensure that raw sewage is not deposited into the rivers or onto the land around the respective sewage plants at Koster and Swartruggens.

2. The municipality must immediately cease using pipes, furrows or trenches to relay raw sewage from Koster and Swartruggens to these rivers.
3. The municipal manager and Municipality must draft a report within 11 business days from the court order on the steps that they had taken to prevent the depositing of raw sewage into the rivers, and how they planned on preventing it in future.[11]

No effective remedies were put in place. On 12 January 2021, Judge Gura ruled that KCR should take charge of the water and sewerage works and repair it at the expense of the municipality until KLM appointed an implementing agent to manage ongoing treatment.

Commentators described this as a landmark ruling that will allow other municipalities to take similar action.

KCR took over the water and wastewater treatment works in January 2021, and raised the funds privately that were needed to restore it to sound working order within days. (They were subsequently reimbursed for most expenses and are pursuing legal action for the balance.)

They brought in Afriforum's non-profit service delivery support entity, Pionier Services, to assist.[12] Newspaper reports quoted residents as being very happy with their performance and with the rapid improvement in the quality and reliability of water services provided.

The court ruling saw government's response split, with KLM and Provincial CoGTA being strongly critical of the ruling, while national government minsters – the national Ministers of Environmental Affairs, Human Settlements, Water and Sanitation, who were respondents – agreed to abide by the court's decision, effectively leaving the local government to take responsibility for the crisis.

KLM, meanwhile, issued a statement saying that the take-over was illegal, and appealed the judgement, with the support of provincial CoGTA. A senior provincial CoGTA official, Mr Seth Ramagaga, stated that while the provincial government agreed that the municipality had financial problems, the infrastructure should not be in private hands.

"Those waterworks belong to the municipality. We admit that a small municipality struggling with revenue couldn't keep the service at the level it was supposed to be. They went to court, and the interim order said these guys are authorised to operate and appoint other people.

"We had a problem with [it] because the Constitution is very clear that if a municipality fails to do their duties, provincial and national should take over. In this case, the court gave the authority to the concerned residents," Ramagaga said. "We are prepared to go as far as the Constitutional Court because it is that court that must protect the Constitution."[13] The MEC for provincial CoGTA echoed this, allegedly stating, "We will never agree that the constitutional mandate of the municipality should be hijacked by the communities. It is irregular. It is a serious error we are correcting on our internal capacities at the municipality." (ibid) The fact that KCR enjoyed strong support and vocal support from Afriforum heightened polarisation between KLM and the KCR.

[11] https://afriforum.co.za/en/afriforum-and-kgetlengrivier-concerned-residents-want-municipal-manager-jailed-service-company-launched/

[12] Pioneer is a non-profit company established by Afriforum to provide support to communities wanting to manage municipal services themselves in the areas of managing water resources and providing clean drinking water, manage sewerage, managing refuse removal and landfills and providing electricity.

[13] https://www.news24.com/news24/opinions/fridaybriefing/watch-raw-sewage-and-no-water-how-citizens-of-2-north-west-towns-took-charge-of-services-20210218

In March 2021, KLM appointed Magalies Water as its implementing agent to run the water and wastewater treatment works in Koster and secured a court order to compel KCR to hand back control of the plant. Reimbursement to KCR for its repair and service costs was delayed, and so KRC retained control of the works from 7 January to 13 May 2022, until compelled by a further court order to relinquish it.

Magalies Water has appointed a process and quality management specialist to run the Koster water and wastewater treatment plants, with the support of a Magalies Water electrician and mechanic. Municipal workers are responsible for all other functions.

Although there has been a marked improvement in the quality of water supplied, the Blue Drop and Green Drop assessments indicate severe ongoing challenges.

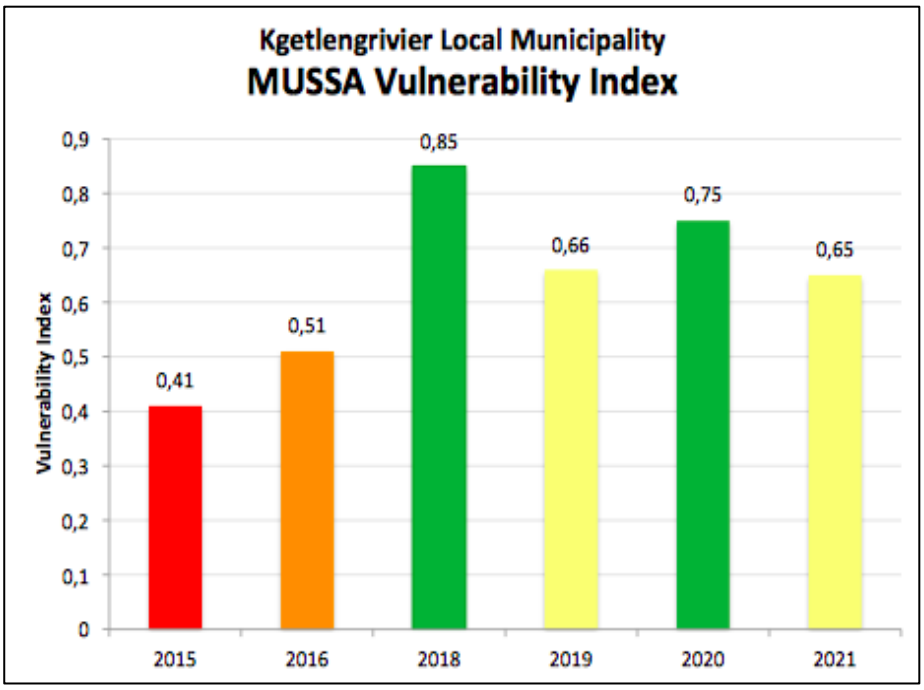
The KCR has now won the right to appeal the Court ruling that compelled it to return control of the works to KLM. The case hearing was set for 27 October 2022. The KCR aims to demonstrate that the municipality is not able to provide services in line with its mandate, and that KCR should be allowed to take over for at least three years, with a Memorandum of Understanding (MOU) signed with the municipality to this effect. It should be noted that even if the municipality is found to be deficient in the exercise of its mandate, it does not follow that only KCR should be considered as an alternative.

KCR also aims to persuade the Court to jail the municipal manager for 90 days, in line with the original order of Judge Guru, because the municipal manager failed to fix sewage spills within 10 working days as required. Afriforum, ‘a friend of the court’, said that ‘enforcing the suspended sentence is unfortunately the only way to ensure that this type of mismanagement stops.’[14]

KCR maintains that the works should not be handed back to the municipality without appointing a suitable service provider that will ensure the sustainable functioning of the sewage and waterworks. KCR’s preferred service provider is the Afriforum-aligned Pioneer Services, whose head said saw “a golden opportunity to establish a new model for community involvement in service delivery and to contribute to the future of this country." (Ibid)

Meanwhile, in its 2021 Municipal Strategic Self-Assessment response, KLM rated the vulnerability of its business management systems as a WSA as “moderate”. KLM’s assessment of its own performance is relatively positive and provides little hint of the dire state of actual performance. Notwithstanding a score of 2% in the 2021/22 Green Drop assessment, KLM’s MUSSA responses shown below suggests a plucky municipality trying to do its best in difficult circumstances with inadequate funding, with moderate to low vulnerability.

[14]https://afriforum.co.za/en/afriforum-and-kgetlengrivier-concerned-residents-want-municipal-manager-jailed-service-company-launched/



Key:
Red: Extreme vulnerability
Orange: High vulnerability
Yellow: Moderate vulnerability
Green: Low vulnerability

Figure 43: MUSSA Vulnerability Index for KLM (2015-2021)

Municipalities who perform poorly in the MUSSA are required to complete a Municipal Priority Action Plan (MPAP) but there is little evidence that the municipality has been able to address the challenges revealed in the MUSSA.

WSA FINANCIAL PERFORMANCE

According to its 2021 MUSSA assessment, KLM collects less than 50% of billed revenue for water and sanitation services, and less than half of connections are metered and billed. Revenue income is declining.

Water services operating account position

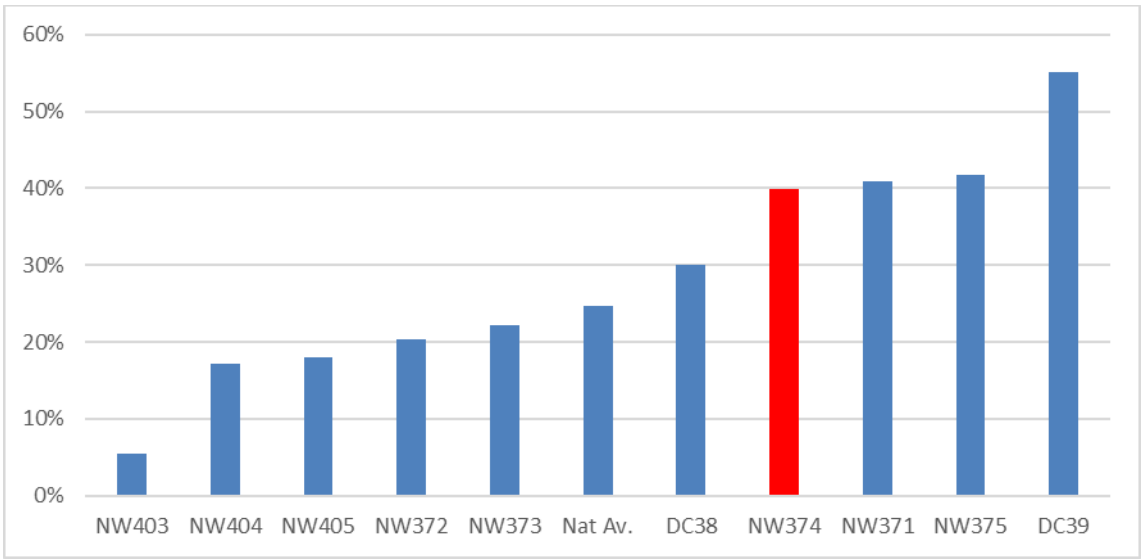


Figure 44: % of water expenditure covered by revenue (surplus/ deficit)

The data shows a severe deficit in the operating account.

Water services tariff coverage

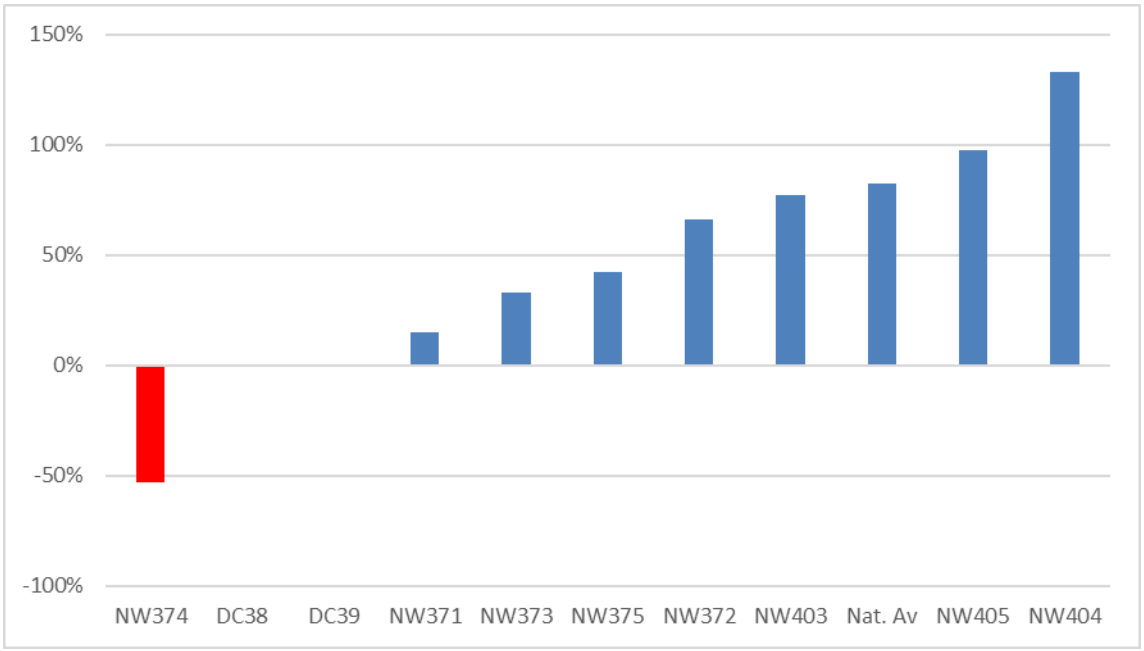


Figure 45: % of water expenditure covered by tariffs in the North West

The data shows a severe deficit in cost recovery.

Tariff revenue per high income household

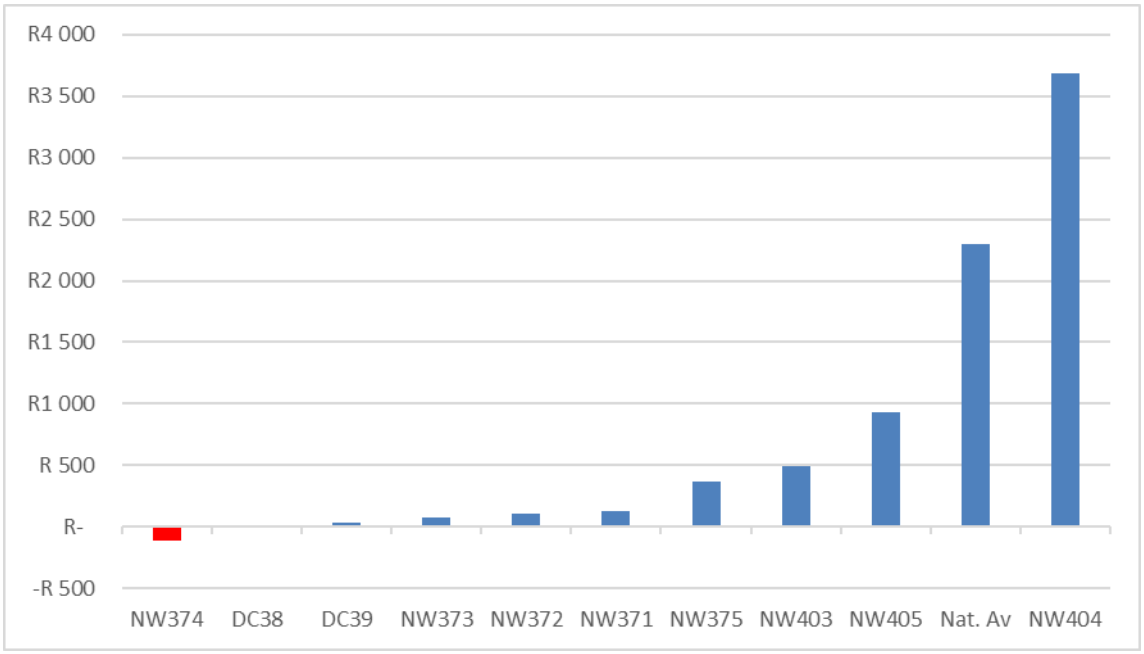


Figure 46: Average tariff revenue per High income household in the North West

The tariff revenue shows a severe deficit even for high income households, which indicates a nett loss from the provision of water services and no scope for cross-subsidies.

Audit performance

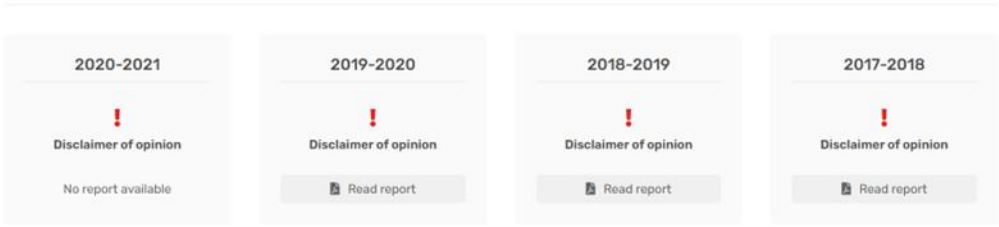


Figure 47: Audit Outcomes

Source: Municipal Money (n.d)

The audit outcomes for KLM reflect that the municipality provided insufficient evidence on which to base an audit opinion.

Cash coverage

The cluster of bars is ranked from left to right with Kgetlengrivier as the first bar and Ramotshere Moiloa last. It indicates substantially better cash coverage in 2020/2021 than in 2018/19.

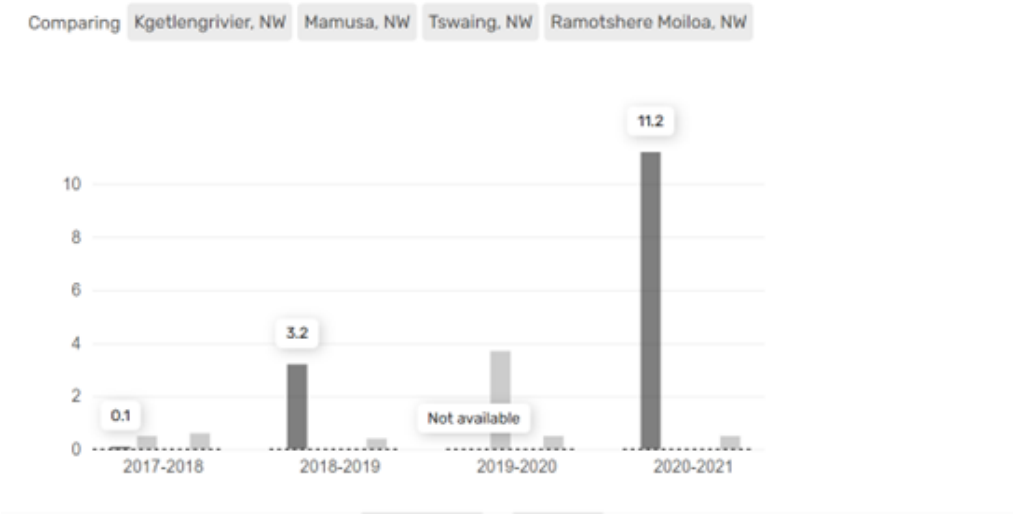


Figure 48: Cash coverage for KLM and similar NW municipalities

Source: Municipal Money (n.d)

Spending of capital budget

The cluster of bars is ranked from left to right with Kgetlengrivier as the first bar and Mamusa last. It shows that KLM overspent its capital budget by 571%.

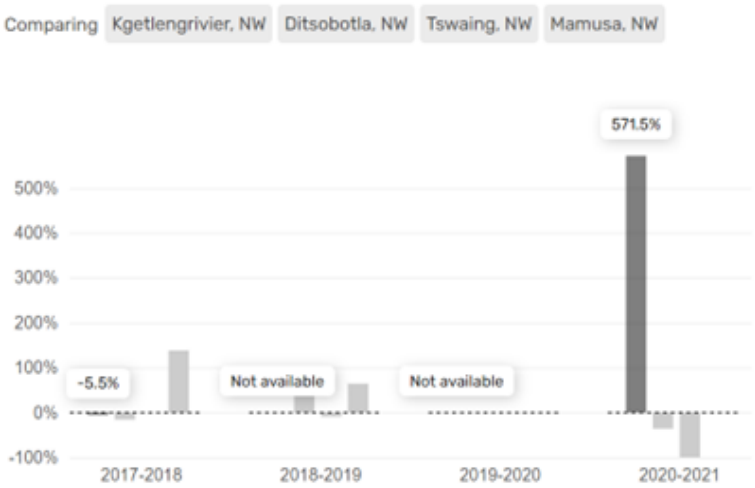


Figure 49: Spending of capital budget for Kgetlengrivier and similar NW municipalities

Source: Municipal Money (n.d)

Spending on repairs and maintenance

The cluster of bars is ranked from left to right with Kgetlengrivier as the first bar and Lekwa-Teemane last. Spending on repairs and maintenance in KLM has been far below reasonably expected performance levels with 4.3% spent in 2017-2018, 2.6% in 2018-19, and no data available for the following years.

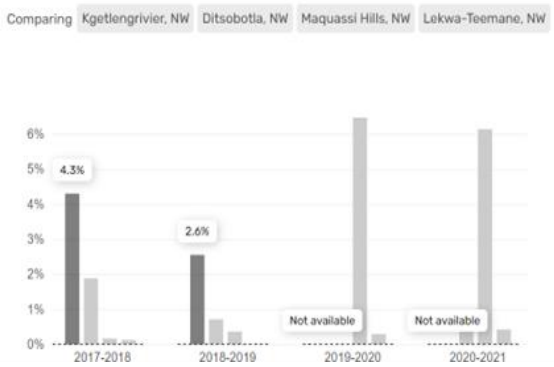


Figure 50: Repairs and maintenance for Kgetlengrivier and similar NW municipalities

Source: Municipal Money (n.d)

Fruitless and wasteful expenditure

The cluster of bars is ranked from left to right with Kgetlengrivier as the first bar and Ditsobotla last. It shows a significant increase in fruitless and wasteful expenditure.

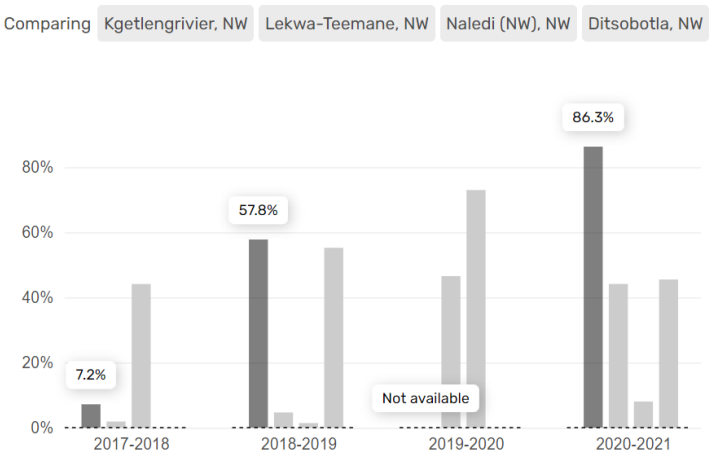


Figure 51: Fruitless and wasteful expenditure for Kgetlengrivier and similar NW municipalities

Source: Municipal Money (n.d)

Current ratio

The cluster of bars is ranked from left to right with Kgetlengrivier as the first bar and Tswaing last. It shows that KLM's ability to meet its short-term funding obligations is poor and declining.

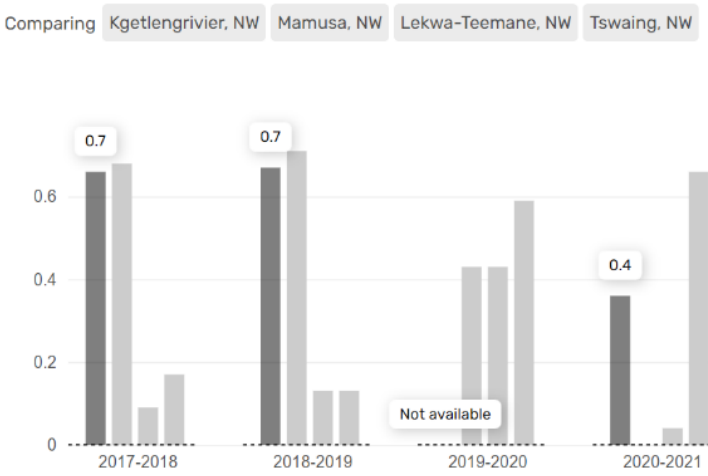


Figure 52: Current ratio for Kgetlengrivier and similar NW municipalities

Source: Municipal Money (n.d)

Liquidity ratio

The data shows that KLM has very little cash in hand and a very poor ability to convert its assets into cash.

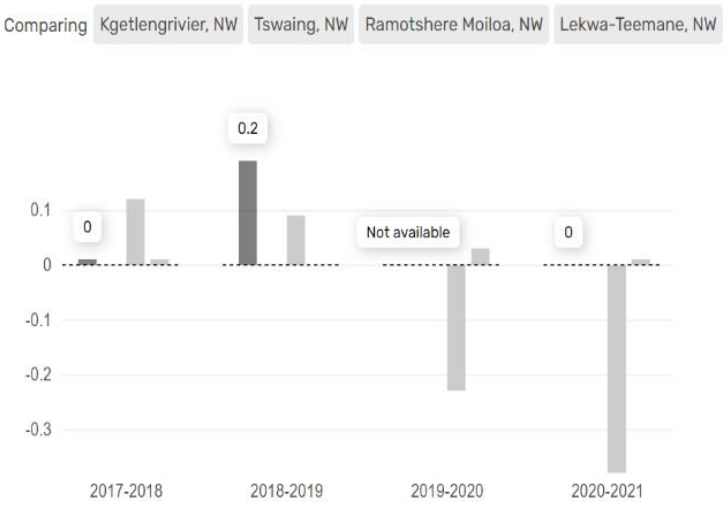


Figure 53: Liquidity ratio for Kgetlengrivier and similar NW municipalities

Source: Municipal Money (n.d)

Current debtors' collection rate

The data shows that KLM collected only half of what it billed in 2018/2019, and that no further information is available on its current performance. This is cause for concern.

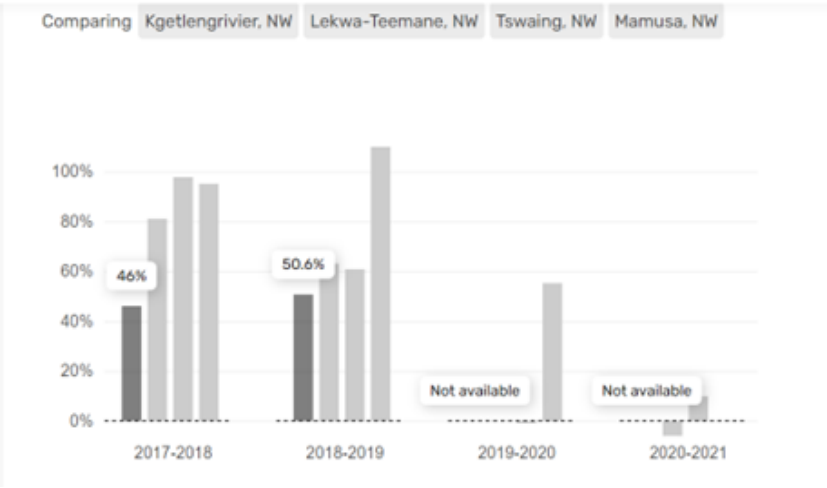


Figure 54: Debtors collection rate in Kgetlengrivier vs. similar districts in NW

Source: Municipal Money (n.d)

National conditional grants

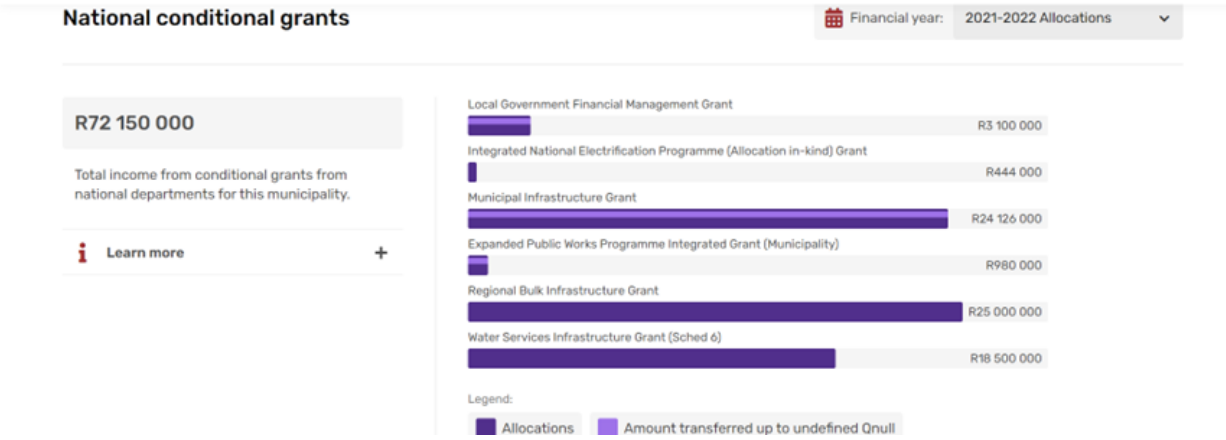


Figure 55: Total income from conditional grants from national departments in Ngaka Modiri Molema

Source: Municipal Money (n.d)

Sources of Revenue

Figure 56: Sources of revenue for Ngaka Modiri Molema

Source: Municipal Money (n.d)

Staff wages and salaries

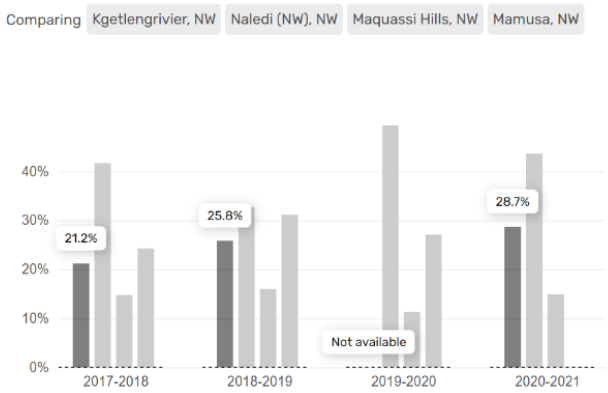


Figure 57: Staff salaries and wages as a % of operating expenditure in comparison to similar municipalities

Source: Municipal Money (n.d)

GOVERNANCE HISTORY

Political leadership

The ANC retained its majority in the 2021 local government elections, despite a 43% decline in the number of votes cast for the ANC since 2011. The Vryheidsfront Plus is now the official opposition, ahead of the EFF, while the DA lost substantial support.

Table 28: 2021 local government election results

	ANC	EFF	VF +	DA
2011	74.89% 16,693		1.5% 342	20,49% 4,568
2016	55,8% 14311	18,285 4668	6,76% 1734	17,25% 4423
2021	56,1% 11620	11,51% 2351	11,61% 2404	7,76% 1607

Water services leadership changes

A Director: Infrastructure and Technical Services was appointed in August 2022 after a long period of acting appointments. This official is responsible for the WSA function.

Municipal interventions: causes, actions, and results

KLM has a chequered governance history. It has been categorized repeatedly by CoGTA as dysfunctional amidst reports of ongoing corruption, poor governance, and lack of consequence management. It was placed under Section 139 (1) (b) Administration for a year from September 2018, after a severe breakdown in services and extensive community protests, prompted by the then-Mayor giving priority to tarring the road to her guesthouse over tarring the road to the local hospital. The Municipal Manager repeatedly challenged the terms of reference of the Administrator and co-operation was limited. Nonetheless, the Administrator was obliged to rely heavily on the MM for information and guidance, in view of her lack of familiarity with the context and dynamics, in ways that undermined her autonomy and authority as the Administrator.

The Administrator's close-out report in late 2019 noted that sewer spillage was being addressed with the additional funding from the WAR Room based at the provincial COGHSTA and the major Wastewater Treatment Plan at Koster, which was nearing completion. Blockages in the implementation of capital projects were addressed and the municipality replaced internal water reticulation for both Koster and Swartruggens through a drought relief grant but was unable to replace the bulk pipeline due to funding constraints. An external support team worked on a revenue enhancement strategy.

Critics of the municipality state that the Action Plan drawn up by the Administrator in 2018-19 has been largely disregarded, and that the financial position of the municipality continues to deteriorate. KLM has approved unfunded budgets for at least the past two years and relies heavily on the Equitable Share to pay salaries and other costs. KLM's 2021 capital budget was 571.5% overspent (Municipal Money, 2022).
In August 2021, KLM was one of five North West municipal councils that Cabinet decided to dissolve because of severe dysfunction. The Council was not dissolved because local government elections went ahead three months later, with dissolution of the incumbent Council an essential part of the process of appointing a newly elected Council.

In May 2022, KLM was again placed under administration, this time because of the dire state of its finances, which made intervention under Section 139 5 (a) and (c) mandatory. CoGTA described the municipality as 'on the verge of collapse'. When under Administration, implementation of a financial recovery plan process is monitored by National Treasury and Provincial Treasury.

The person appointed to serve as Administrator, Mr Ben Mothogoane, was previously the Chief Financial Officer (CFO) in KLM from 2012 until he resigned in 2017, allegedly because of his involvement in the irregular appointment of a service provider appointed to sell prepaid electricity. KCR is currently preparing court papers to challenge this supply chain irregularity in court, as they claim very little of the money collected by the service provider for electricity payments has been paid over to the municipality or to Eskom.

In July 2022, KLM owed Eskom R239 million, increased from R166 million in June 2021. Repeated agreements with Eskom to settle the debt have been broken. KLM is also substantially in arrears to Magalies Water for bulk water purchases and other services, but the exact amount is not known.

DISCUSSION ON WSA PERFORMANCE AND THE IMPACT OF CONTEXTUAL AND GOVERNANCE FACTORS

Section 139 of the Constitution empowers a provincial government to intervene when a municipality cannot or does not fulfil an executive obligation in terms of the Constitution or legislation. However, the provincial administration did not have the capacity to intervene because it was itself under administration from May 2018, after the Cabinet resolved to invoke section 100 (1) of the Constitution and placed 10 North West provincial departments and the Office of the Premier under Administration. Intervention on this scale was unprecedented, as previous interventions in provincial government had only affected a few departments.[15] Five provincial departments remained under administration for four years, until March 2022.

For this reason, the water services challenges in KLM should not be seen apart from the wider decay of good governance in North West Province and more widely. In May 2022 the Auditor General noted 'a worsening culture of accountability in the province over the past five years. Every municipality in the province had transgressions regarding compliance with finance management'.

Most pressing challenges facing WSA (institutional, governance, regulatory, financial)

Financial

Low and declining revenue has been a key driver of service collapse. KLM relies largely on government grants and transfers and collects less than 50% of the service revenue due to it. Payments are not enforced in townships, allegedly for fear of alienating further support from the ANC. Selective collection contributes to resentment from those who do pay and undermines collection efforts. The Council is currently exploring ways to differentiate between those townships residents who can pay for services, and bill them, and those who cannot.

A further drain on KLM's finances and cognitive bandwidth is ongoing litigation with KCR, with the head of KCR claiming 31 successive victories in court cases against the municipality. There has been at least one auction of a municipal plant and equipment to raise money to pay the penalty imposed by the court, and a further auction is imminent to settle a further claim. The auction of the municipal plant and equipment at fire-sale prices is likely to debilitate service delivery further.

Institutional

KCR is preparing to go to court in late October to challenge KLM's fitness to remain in charge of water services and to demand that it (more accurately the Koster and Swartruggens Trust) be given the authority to provide water and wastewater services. They aim to provide evidence that the municipality cannot provide the necessary services, and that KCR should be appointed to take over. Their plan is to appoint Pionier Services Company as their service provider on a three-year contract. They envisage taking this matter to the Constitutional Court in view of its importance.

Operational

Water pollution continues unabated from the malfunctioning Swartruggens Wastewater Treatment Plant, which continues to release untreated sewage directly into the Elands River. The KCR has an extensive collection of photographs and short videos that show evidence of sewage spills and overflows, as well as municipal vacuum

[15] Under Section 100 (1)(a), a directive is issued to the provincial executive, describing the extent of the failure to fulfil its obligations and stating any steps required to meet its obligations': : Department of Finance, Economy and Enterprise Development (FEED); Department of Local Government and Human Settlement; Department of Rural, Environment and Agricultural Development (READ); Department of Social Development and Department of Tourism;

Under Section 100 (1)(b), 'where a responsibility is assumed for the relevant obligation in that province to the extent necessary': Office of the Premier; Department of Community Safety and Transport Management; Department of Basic Education and Sports Development; Department of Health; and Department of Public Works and Roads.

tankers discharging sludge directly into the Elands River. DWS is very aware of this, and on 12 August 2022 was given a detailed tour of pollution sites.

Appointing a water board to manage treatment is only a partial solution that does not resolve broader service problems that range from water conservation and demand management in an area prone to severe drought, through to cable theft that disables pump stations. Water boards can offer specialist services but are not equipped to second resources to the extent required nationally. In KLM, the work of a technical team of three: a specialist process and quality technician, an electrician, and a mechanic, has made a significant difference to local drinking water supplies, but the system is still plagued by system outages for a variety of reasons, ranging from source constraints, to underfunded O&M to theft and vandalism. These are far more complex to rectify and manage and underline the importance of having access to capable water services specialists who can provide strategic direction in the planning and delivery of water and sanitation services, within the context of overall municipal management.

LEARNINGS FOR REVIEW OF WSA MODEL IN SOUTH AFRICA

Regulation: Current regulatory mechanisms are inadequate to remedy gross deficiencies in the way municipalities undertake their WSA and WSP responsibilities. Ongoing external support efforts by DWS, coupled with warnings and directives over the past 15 years at least, have not yielded lasting improvements. It seems unlikely that DWS's regulatory measures will have the kind of impact required unless also accompanied by criminal prosecution of individuals where warranted. At the same time, the high turnover in senior municipal personnel makes it difficult for DWS to take firm regulatory action against individuals who flout directives. It remains to be seen whether KLM's Municipal Manager will in fact be sent to jail; short of this, there seem to be few incentives for real change.

Intervention: Putting municipalities under Administration has little lasting effect, because a small team with few resources and a brief mandate cannot remedy the underlying structural, systemic challenges facing KLM and numerous other municipalities – poverty, unemployment, unaffordable O&M on a growing portfolio of infrastructure projects funded by use-it-or-lose-it capital grants, and wider political economy ecosystems that thrive on municipal tenders and related patronage systems.

Courts as recourse for non-performance, lack of accountability and governance failures – third parties as interim service management: Given the evident failure of the available prescribed remedies, there is growing evidence that the Courts will support residents who hold their respective municipalities accountable for their Constitutional obligations. The January 2021 North West High Court decision to hand over responsibility for running the water and wastewater treatment works to KCR takes this a step further, by allowing third parties to take over interim service management when the municipality fails. It should be noted, though, that that ruling was only ever intended as a short-term measure, and in any case, discrete management of treatment works is fundamentally different to taking full responsibility for providing viable water services. It would be inappropriate for the Courts to play a role in re-assigning service responsibilities without a more robust process of considering different options.

Authorisations: The evidence suggests that the current WSA-WSP model is inappropriate in small municipalities which struggle to resource the WSA role adequately and conflate the WSA and WSP roles. At best, priority is given to recruiting one senior official able to drive water services; recruiting additional senior people to provide the strategic leadership envisaged by the WSA role, separate from the role of service provision, is unlikely. KLM employs no senior water specialists of any kind, and there is little prospect that the functions of WSA and WSP can or will be handled separately.

Functional oversight: Given the conflation of WSA and WSP roles within KLM and many other municipalities, there seems to be an implicit assumption that the municipal Council will play the oversight role, leaving technical officials to drive service delivery, with Project Management Units (PMUs) managing capital programmes. Councillors in KLM do not have the training or competencies required to oversee water services provision to the extent required. However, even if the Council does play a role in service oversight, the evidence

suggests that in KLM the Council is not equipped to lead planning, let alone policy development. This leaves a big hole around the WSA role as envisaged in the Strategic Framework for Water Services.

Intra-municipal WSA/WSP roles: Conflating the roles of WSA and WSP, and keeping both in-house, is fraught with problems. But this is unlikely to change for as long as all the funding mechanisms for financing and supporting water services incentivize municipalities to keep these functions in-house. Real change in the way water services is planned, managed and regulated locally is unlikely without far-reaching changes in municipal funding arrangements. One option might be to explore demand-side rather than supply-side subsidies for low-income households, to support a shift in payment practices and accountability for non-payment of service charges. The technologies and payment mechanisms already exist to support grant payments, and these could presumably be revised to support payment of municipal services by individuals and their households. This approach would have the added advantage of supporting water conservation and demand management, by holding users more accountable for the services they consume, and potentially reducing the need for ongoing expansion of infrastructure that results from inefficient and often wasteful consumption.

Rationalisation: 150-plus WSAs and even more WSPs are far too many. Some rationalisation is essential, in the interest of making the best use of scarce specialist skills, to support greater professionalization in water services provision and to support better scale economies.

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Parliamentary Monitoring Group (PMG). The figure of R141-m is reported widely, but the cost-overrun is far higher. https://static.pmg.org.za/201016Magalies.pdf. The figure of R141-m is reported widely, but the cost-overrun is far higher

Articles

https://afriforum.co.za/en/afriforum-and-kgetlengrivier-concerned-residents-want-municipal-manager-jailed-service-company-launched/

https://static.pmg.org.za/201016Magalies.pdf The figure of R141-m is reported widely, but the cost-overrun is far higher

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WSA REVIEW: CITY OF MBOMBELA CASE STUDY REPORT

MUNICIPAL CONTEXT

Mbombela Local Municipality (MP326) is situated in the Ehlanzeni District within Mpumalanga Province. The district covers an area of 5 394.4 km^2 with a density of 109.1 km^2. Before amalgamation, Mbombela was a secondary city (type B1) with around 700 000 inhabitants while Umjindi was regarded as a small town (B3 type) municipality with around 55 000 inhabitants. On August 3, 2016, Mbombela Local Municipality and Umjindi Local Municipality merged to form the City of Mbombela Local Municipality (CoM or 'the City').

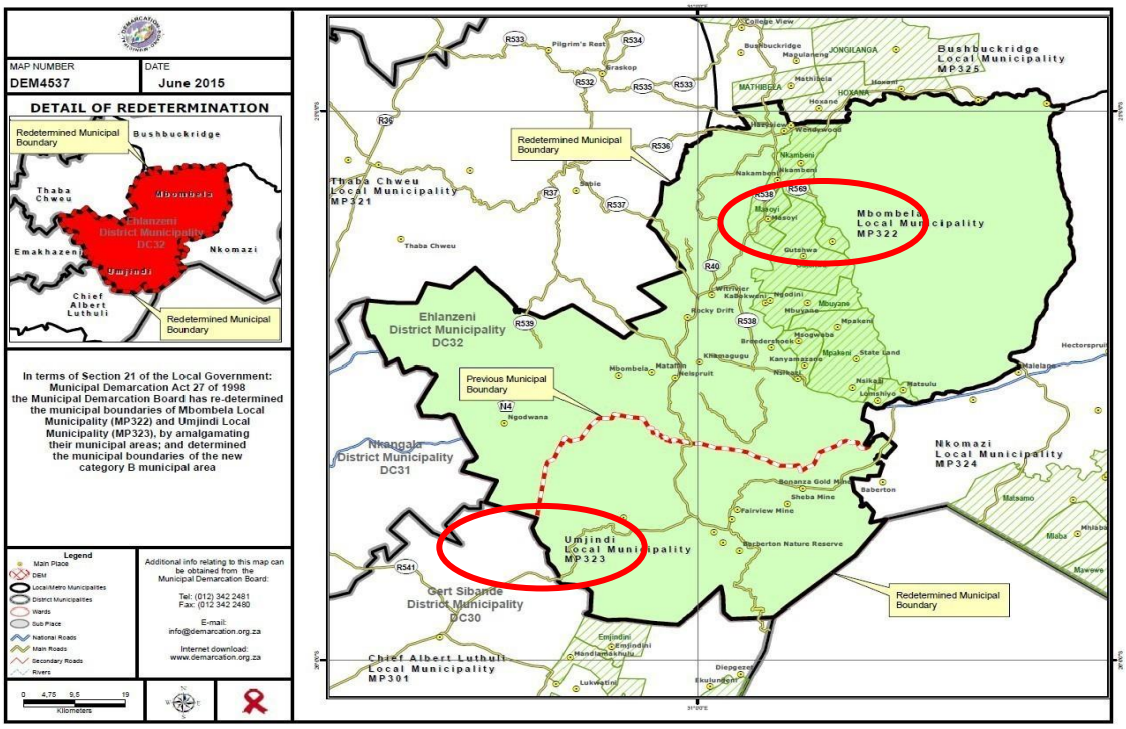

Figure 58: City of Mbombela municipal area (Source: Municipal Demarcation Board)

The population of the City of Mbombela was estimated at 622 000 in 2016, and is predominantly rural, with approximately 79% of the population residing in rural settlements in 2016 (based on the Stats SA definition of rural).

The human settlement data shows a lower population growth rate, decreasing household size, but growth in the number of households – higher than the rate of population growth. The population grew at a rate of 2.1% per annum between 2001 and 2011, and at a rate of 1.1% per annum between 2011 and 2016 (Census 2011 and Community Survey 2016). The rate of growth in the number of households was 2.5% per annum between 2011 and 2016, which is higher than the rate of population growth. National Treasury estimated that there were 206 136 households in the City of Mbombela in 2018.

Levels of poverty in the LM are high, signifying lower levels of service collections that impact revenue capability. Equitable Share data shows that 59% of the total number of households are classified as poor.
The economy of the City of Mbombela has grown at an average rate of 3.6% in real terms between 1996 and 2018. The tertiary economic sector, which includes government, personal and community services, is the largest contributor to the economy at approximately 23%. The wholesale and trade economic sectors are

stimulated by the strategic location of the municipality between Gauteng and Maputo, contributing 22% to the economy.

The municipality also has a strong financial and business services industry, which contributes 18% to the economy. There is significant agriculture in the area due to the moderate climate, which has led to an increase in manufacturing providing services to this and other industries, contributing to 12% of the economy. Due to its location next to the Kruger National Park, the municipality benefits from tourism.

WSA AND WSP ARRANGEMENTS

The timeline below provides an overview of CoM as the Water Services Authority (WSA) circa 1999 to present.

Mbombela WSA timeline

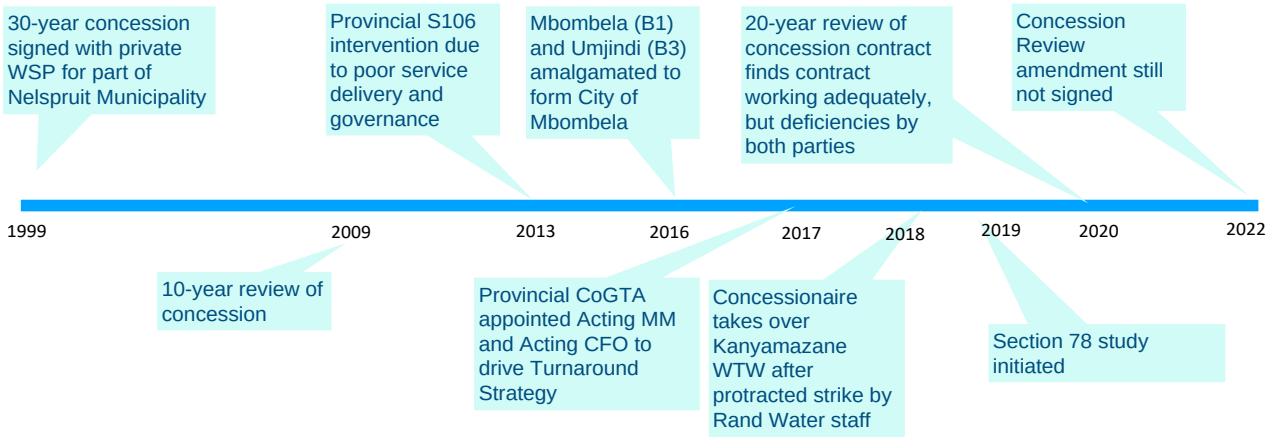

Figure 59: CoM WSA timeline

CoM is the water services authority (WSA) for the entire. There is a split water service provider (WSP) arrangement between the City as the WSP for about 46% of municipal population and the Concessionaire, Silulumanzi, responsible for the provision of water services to about 54% of the population. The area is inside a geographic area known as the 'Concession Area'. There is no water board serving the City of Mbombela with the municipality and Concessionaire responsible for their own bulk water supply.

In 1999 the Nelspruit Transitional Local Council signed a 30-year concession agreement with the Greater Nelspruit Utility Company (GNUC). The intention of the concession arrangement was for the private sector partner to inject the necessary capital and management resources into the water and sanitation operations, so it could more quickly and effectively meet the service delivery requirements in the concession area. The assets were taken over from the Municipality in 1999 and are leased from the Municipality for a nominal fee for a total of R100 million over the 30-year contract period to 31 October 2029.

The Concessionaire receives R30 million annually (escalated as per the Division of Revenue Act (DoRA) increases) from the City which is part of the Local Government Equitable Share. This is allocated primarily for the provision of Free Basic Water (FBW) to qualifying households. But 21.3% of the Equitable Share allocation to the Concessionaire is used for water conservation and demand management measures. The Concessionaire can use Municipal Infrastructure Grant (MIG) funding for applicable projects in the Concession Area.

The Concessionaire has a staff complement of 271 staff. They are responsible for servicing 27 408 customers, of which 1 759 are business and the remainder are residential. Only 60% of the customers metered are paying customers. In the concession area there are approximately 57 000 unbilled, unmetered households who have some form of access to water, either through formal yard connections, water from tanker deliveries or via JoJo tanks. Approximately 80% of the unbilled, unmetered households which are connected to the main Concessionaire system have intermittent supply.

The Concessionaire maintains 1 200km of water pipelines and 700km of sewers. There are three wastewater treatment plans, 99 reservoirs, 44 water pump stations and 30 sewage pump stations under the management of the Concessionaire.

The Concessionaire is operating the Kanyamazane water treatment works, within the non-Concession area, on an emergency basis after employees of Rand Water downed tools on a protracted strike.

The Concessionaire is responsible for provision in urban and peri-urban, low-density areas shown in Figure 3.

Figure 60:The concession area in relation to municipal borders (Source: Sembcorp Silulumanzi, 2018)

The concession contract sets a full range of obligations to be met by the Concessionaire, covering technical, financial and organisational matters. The Concessionaire is also obligated to pay certain fees to the City. The contract sets obligations on the City to, inter alia, manage the contract properly. In the second supplementary agreement, signed in 2003, the City is also obligated to pay a proportion of the grant finance they receive from National Treasury to the Concessionaire to cover the provision of free basic services to poor households. The Concession agreement has 10 years remaining.

The City of Mbombela is currently undergoing a Section 78 assessment. The trigger which initiated the s78 was the expiration of the bulk water services contract with Rand Water. This is in line with the trigger described

in Section 77(b)(ii) of the Municipal Systems Act. In addition, this is an opportune moment to re-evaluate the water provision arrangements, due to the recent amalgamation, as well as proposed formalisation of the operation of Kanyamazane water treatment works by the concessionaire, Silulumanzi.

WSA PERFORMANCE

Water resource development and management is the responsibility of the Directorate: Water and Sanitation within the Department: Technical Services. The City of Mbombela draws its raw water from the surface water sources of the Crocodile and Sabie River sub-catchments. There are five dams in the Crocodile sub-catchment and two in the Sabie River sub-catchment. The whole area of the City has limited access to water resources meaning that water supply will become constrained in the coming 5 to 10-year period, unless water conservation measures can be successfully implemented.

Changes in water access

Table 29: Water service levels 2011-2016

Service level	2011	2016
Flush toilet connected to sewerage	27.6%	31.9%
Piped water inside dwelling	25.2%	37.7%

Source: (Municipalities, n.d.)

As shown in Table 1 above, levels of access to water provision for the entire municipal area has increased. While the beginning of this increase can be dated back to 2001, population growth and the number of un-serviced households is increasing. 65% of the population has piped water within 200m of their dwelling. 7% of households get their water from a communal standpipe within 200m of their house. 15% of households get their water from an unimproved water source, such as a borehole, stream or dam.

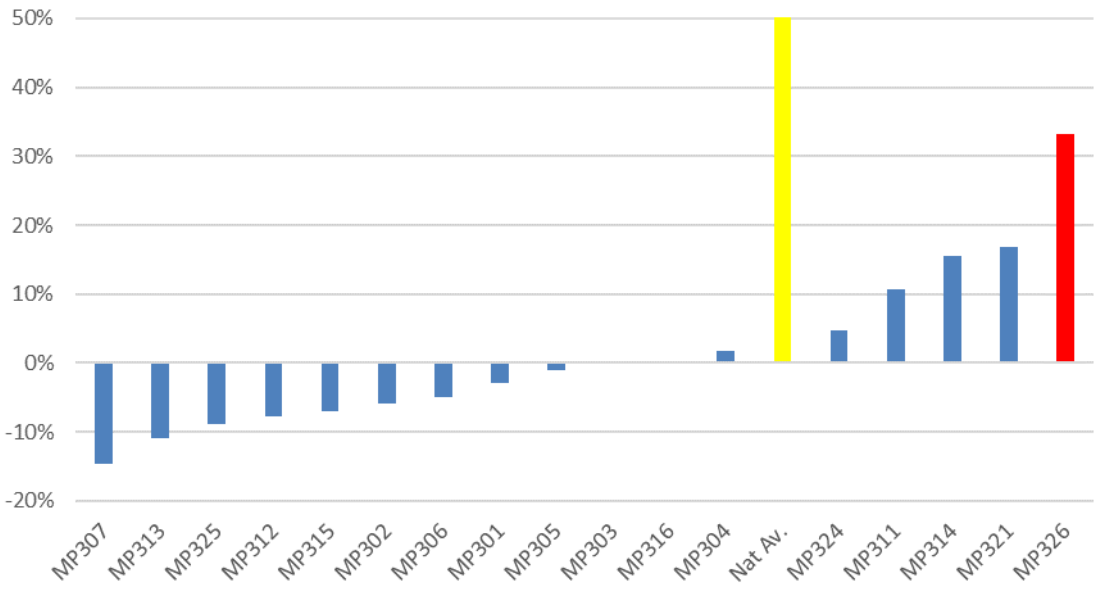

Figure 61: Percentage change in water access in MP: 2011-2016

Figure 4 above displays the percentage of change in water access in the Mpumalanga province for the 2011-2016 period. Highlighted in red is CoMs performance in relation to other municipalities in the province as well as against the national average, the latter visually represented by the yellow bar.

While lower than the national average, the CoM had the highest percentage change in water access in the province, sitting at an increase of approximately 33%.

Changes in sanitation access

There are relatively low levels of access to adequate sanitation in CoM. The Ventilated Improved Pit (VIP) toilets which have been installed by both the municipality and the Department of Cooperative Governance are not emptied or maintained by the municipality. The municipality no longer provides VIP toilets after a decision was taken by Mpumalanga Government that these were not a desirable solution as provincial government has stated that pit latrines have the potential to contaminate underground water. The basis of this statement is unknown, as research indicates that this is not the case.

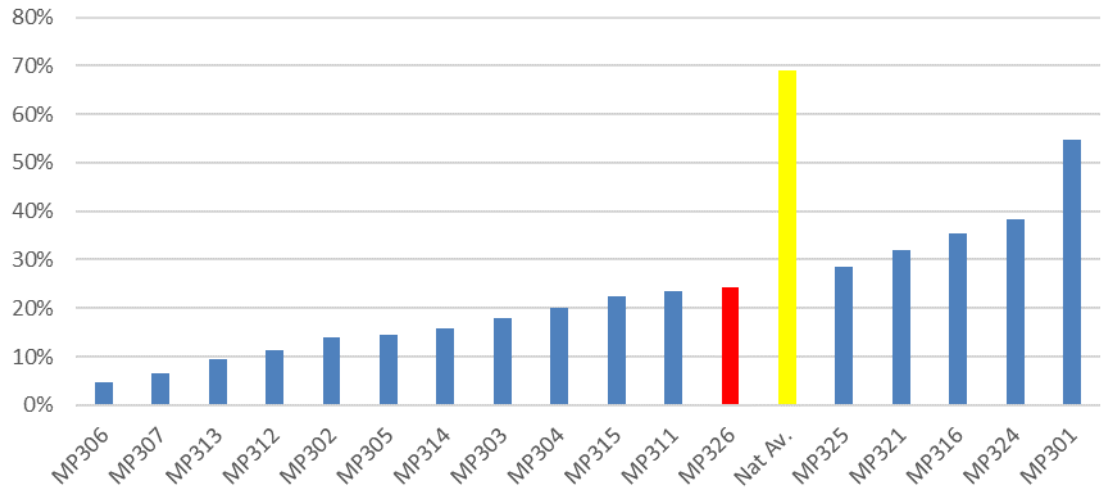

Figure 62: Percentage change in access to adequate sanitation in MP: 2011-2016

As shown in Figure 5 above, changes in access to adequate sanitation services were below the national average. While the national average was almost a 70% change in access, CoM achieved a change that was less than 30%.

Water supply interruptions: 2011-2016

Performance relating to continuity of supply is illustrated in Figure 6.

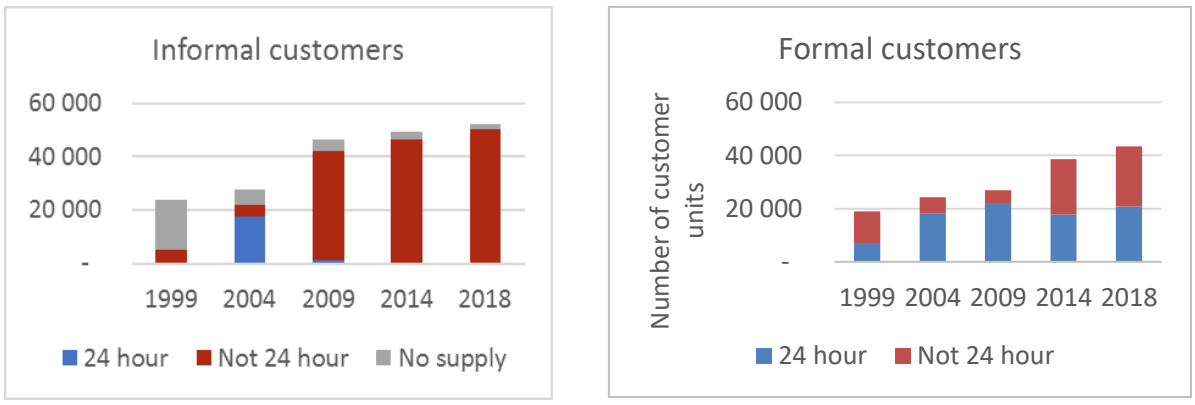

Figure 63: Continuity of water access: informal vs. formal customers in the concession area

These figures show that, while overall access to water is improving in the Concession area, the continuity of supply is not. The breakdown of service levels for 2019 is shown in Table 0-30 below.

Table 0-30 Access to the water service in the City of Mbombela (2019)

	Municipality		Concession		Total	
	Number	%	Number	%	Number	%
Total number of households with access to piped water inside dwelling/yard	18 692	22%	21 042	22%	39 734	22%
24 hour (Standpipes/JoJo tanks)	Unknown		416	0	Unknown	
Interrupted supply (communal standpipes/JoJo tanks)	21 887	25%	15 927	17%	37 814	21%
Interrupted supply (metered/unmetered)	32 937	38%	50 039	52%	82 976	45%
No water (water tankers)	13 161	15%	4 828	5%	17 989	10%
Yard connection with standpipe (unmetered)	Unknown		3 465	4%	Unknown	
Total number of households with access to water	±86 677	100%	95 717	100%	±182 394	100%

Water quality – Blue Drop score: 2022

According to the Blue Drop 2022 Report, eight supply systems in Mbombela/Umjindi are listed as at critical risk. These include five systems that were previously run and managed by Rand Water. At the same time, four supply systems are categorised among the Top 10 Performing Supply Systems in Mpumalanga. Supply systems that are deemed to have complaint water quality data are those currently run by the LM itself and the Concessionaire.

Wastewater performance – Green Drop score

The municipality's Green Drop Score has declined over the 2013-2021 period, averaging a change of approximately -10%. The poor scores are indicative of and align with the poor condition of sanitation infrastructure, specifically sewage treatment plants, that do not comply with the prescribed microbiological standards.

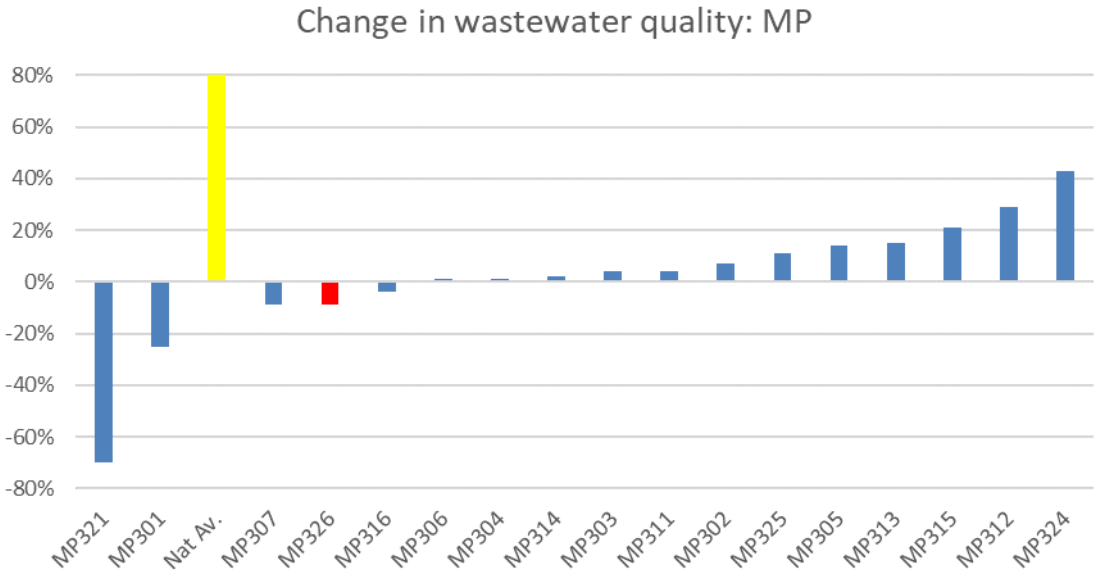

Figure 64: Percentage change in Composite Green Drop score: 2013-2021

WSA FINANCIAL PERFORMANCE

As the WSA, the City of Mbombela is responsible for financial planning for water and sanitation services, accessing financing for new infrastructure and extensions, ensuring that basic services are affordable, and setting tariffs in line with regulations.

The WSP contract arrangement with the Concessionaire provides that the Concessionaire bills customers directly and is responsible for the provision of capital financing to fund infrastructure in the Concession area. However, CoM plays a role in channelling grant finance to the Concessionaire. The contract between CoM and the Concessionaire, provides that the municipality provides a part of the Equitable Share finance to the Concessionaire and allocates part of the MIG to the Concessionaire for projects for low-income households in the Concession Area.

Turning to the City's own activities, the municipality is in a financially stressed position. As mentioned above in Section 2, a financial recovery plan was developed in 2014 for the Mbombela Local Municipality prior to amalgamation. There was little improvement thereafter, and following amalgamation, the financial recovery plan was updated in 2018.

The municipality has been unable to generate operating surpluses over the last few years, which has resulted in lack of cash and an inability to pay creditors, which has a pre-audited figure of R2.1 billion for 2020/21. A poor cash position means that the municipality is unable to raise debt, and this constrains their ability to invest in infrastructure serving non-poor customers. The municipality's capital programme is heavily grant dependent and thus focussed on the poor. While this is socially desirable, it raises concerns about investment in infrastructure that will raise revenue in future.

An analysis of the historical trends for key indicators is presented in the remainder of this section. When viewing these trends, it is very important to bear in mind that the City of Mbombela municipality has existed in its current form only for three of the financial years reported on: 2016/17, 2017/18 and 2018/19. The figures for 2016/17 are unreliable as a reporting period of only 11 months was used in this, the year of amalgamation. Figures reported in the financial years 2012/13, 2013/14, 2014/15 and 2015/16 are the sum of the two former municipalities.

Water services operating account position

As per the data presented below, revenue received from serviced households before the collection of tariff revenue generates enough to cover approximately 25% of the water expenditure. Once more, this is relatively lower than what the national average was for the period in question.

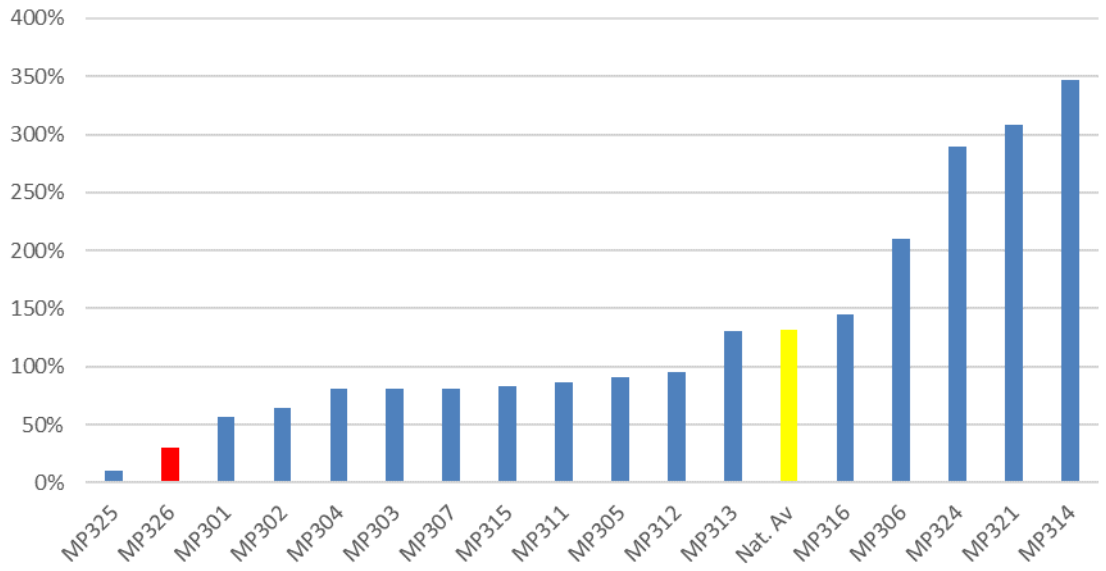

Figure 65: % of water expenditure covered by revenue (excl. tariffs)

Water services tariff coverage

As the WSA, the municipality has the sole legislated responsibility for setting water and sanitation tariffs, a function that cannot be delegated. The municipality can then determine the "tariffs" to be charged by the Concessionaire to the consumers. If the municipality sets tariffs at a lower level than the charges, the difference in revenue must be paid by the municipality to the Concessionaire.

Figure 9 shows the percentage of expenditure on water and sanitation covered by revenue from serviced households. Evidently, tariff revenue covers approximately 25% of the water expenditure, far below the national average of approximately 80% coverage. Given the poverty levels, it is likely that the CoM has a large number of customers who do not pay for the service – whether legally or illegally – further diminishing the amount of revenue generated from tariffs.

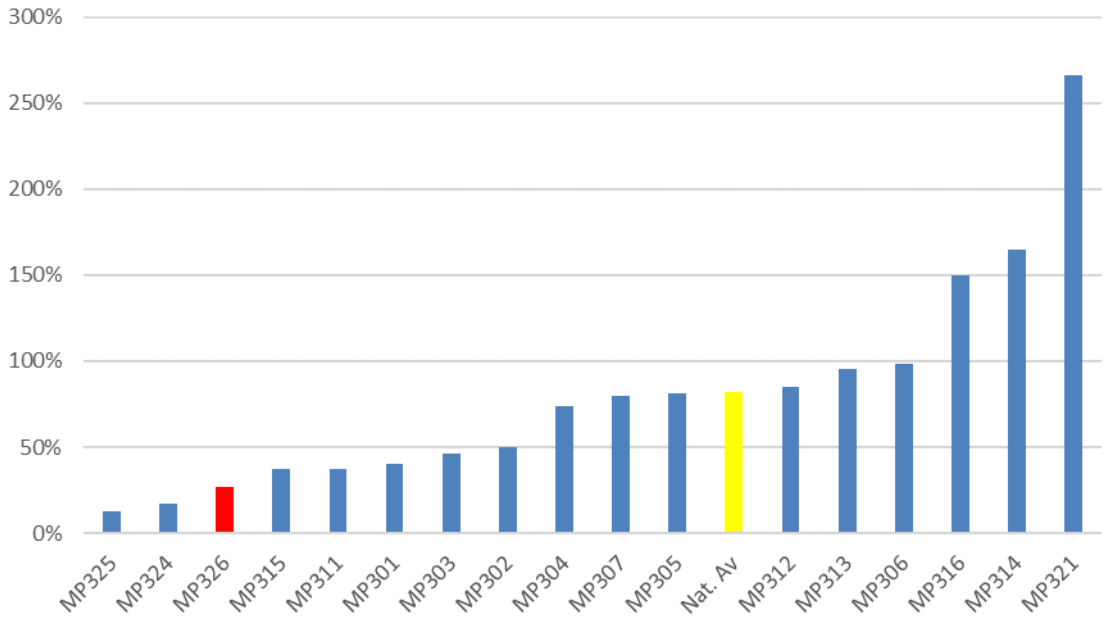

Figure 66: Percentage of water expenditure covered by tariffs in Mpumalanga

Tariff revenue per high income household

As discussed in Section 1, CoM has relatively high levels of poverty. Majority of the households fall within the R1 667-R3 333 monthly income bracket. This means that the pool for high income households is extremely small.

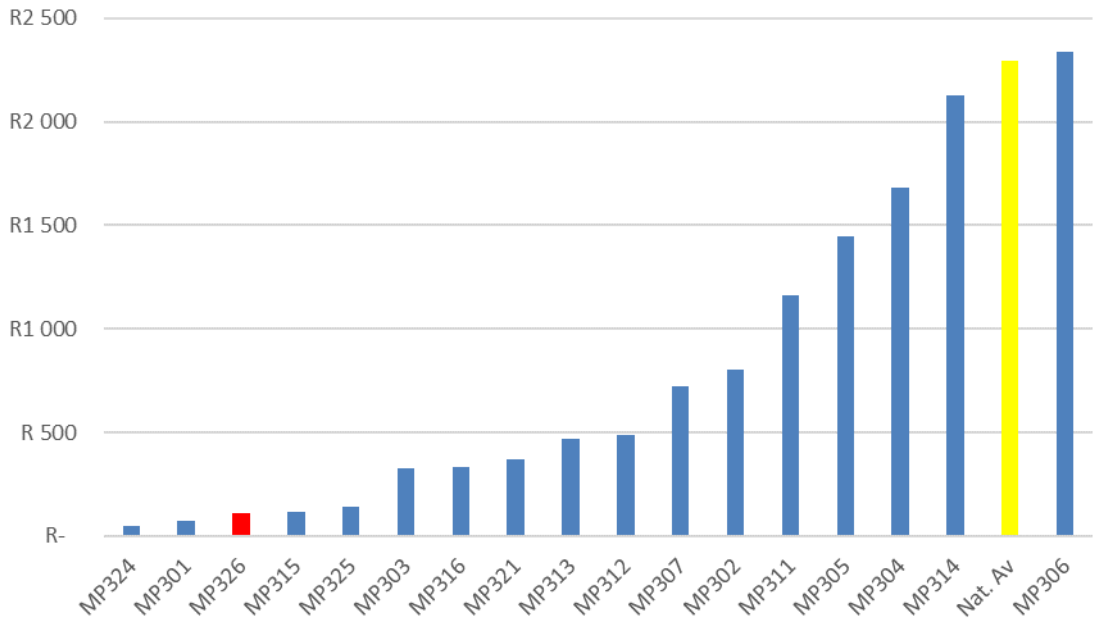

Figure 67: Average tariff revenue per High income household in Mpumalanga

Figure 10 highlights that the CoM is unable to generate large amounts of revenue from high income households. While the national average of tariff revenue per high income household is approximately R2 250,00, CoM generates less than R250 per high income household per month.

Audit performance

The Auditor General has the following findings for the two former municipalities and the amalgamated municipality:

Table 31: Auditor General findings 2012/13 to 2016/17

	2012/ 13	***2013/ 14***	***2014/ 15***	***2015/ 16***	***2016/ 17***	***2017/ 18***	***2018/ 19***	***2019/ 20***
Umjindi	*Qualified with findings*	*Qualified with findings*	*Unqualified with findings*	*Unqualified with findings*				
Mbombela	*Unqualified with findings*	*Unqualified with findings*	*Unqualified with findings*	*Unqualified with findings*				
City of Mbombela					*Unqualified with findings*	*Unqualified with findings*	*Qualified with findings*	*Unqualified with findings*

The City of Mbombela received an unqualified audit, with findings, in 2016/17 and again in 2017/18. The audit findings regressed to 'Qualified with findings' in 2018/19, which is an indication that the municipality's financial reporting is may not represent an accurate reflection of actual performance and position. In 2019/20 the audit results were unqualified, with findings.

Cash and liquidity

CoM's reporting on its case position in the National Treasury Local Government Financial Database has been poor, and audited figures are not available for 2017/18, 2018/19 and 2019/20. Budgeted figures have been used for this period.

The municipality has improved its cash position since 2014/15. However, there was a decrease in cash and cash equivalent at the end of 2018/19, and the overall cash position remains very poor. The cash / cost coverage ratio is still well below the 1 to 3 months recommended by National Treasury.

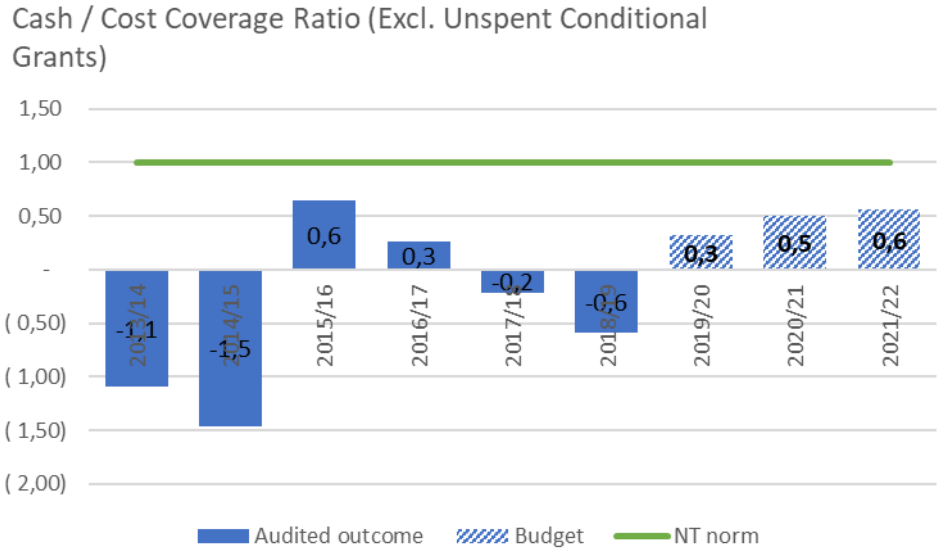

Figure 68: Cash coverage ratio (Excl. Unspent Conditional Grants))

The current ratio is also well below the norm of 1.5.

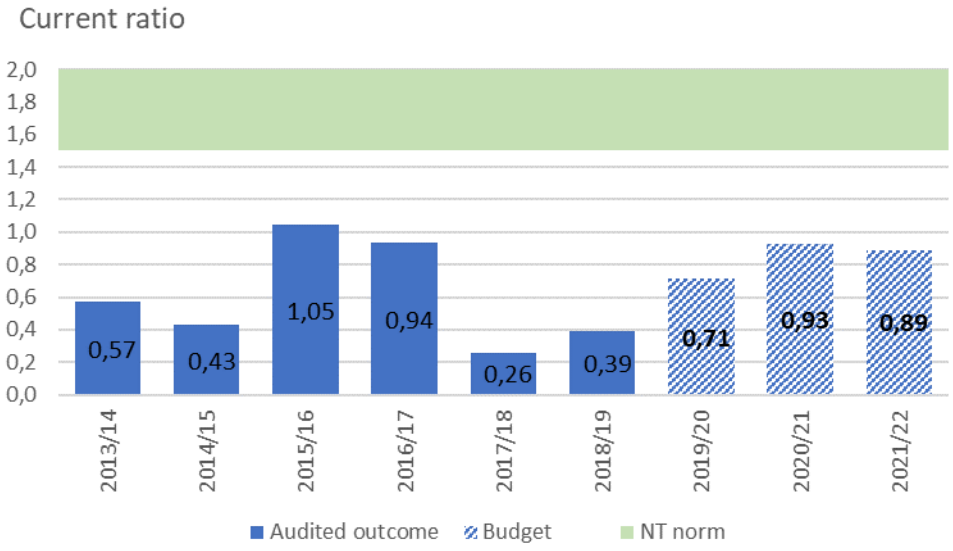

Figure 69: Current ratio

Sources of Revenue

Drawing from the data below for the 2014/15 financial year, almost 64% of revenue was locally generated from rate paying residents of CoM. The remaining 36% of funding was national and provincial government transfers, including conditional grants and the unconditional Equitable Share allocation.

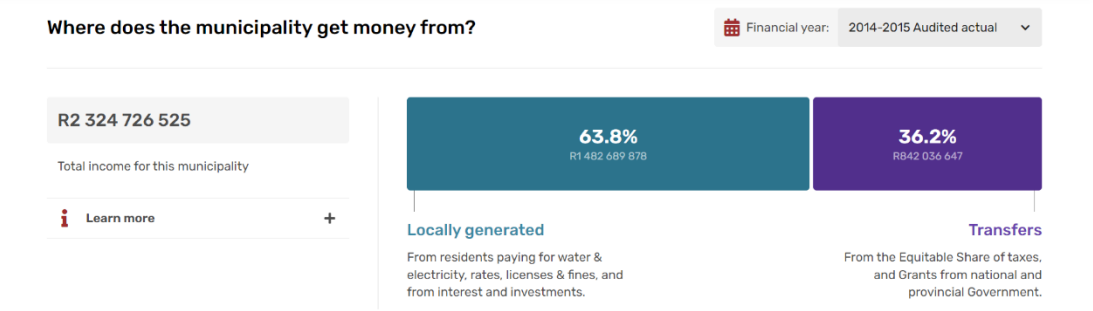

Figure 70: Sources of revenue for City of Mbombela (Source: Municipal Money (n.d))

Capital expenditure

The City of Mbombela is showing alarming decreases in the level of capital expenditure. The extent to which these figures are accurate has not been assessed.

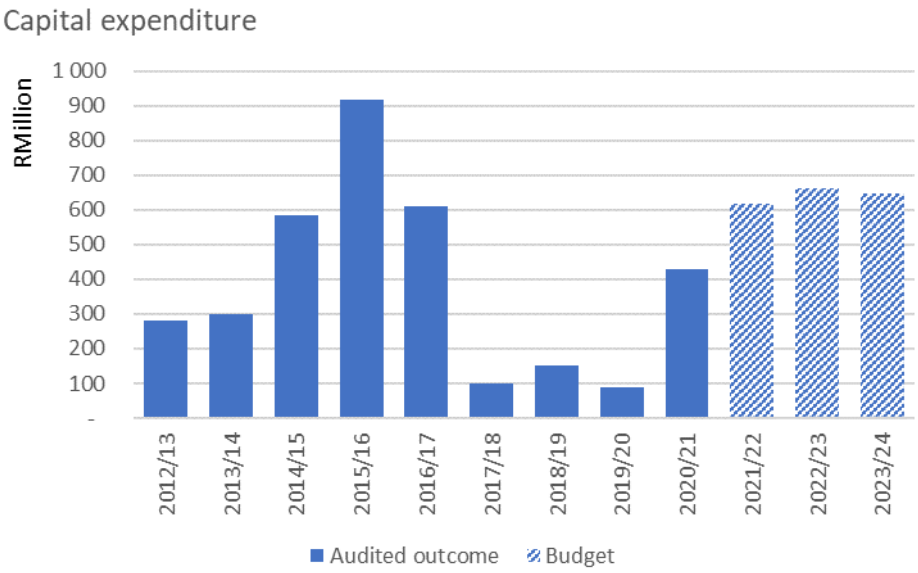

Figure 71: Trend in capital expenditure

Prior to 2017/18, capital expenditure was within the National Treasury norm range of 10% to 20% of total expenditure, with the exception of 2015/16 when it was above. There was a slump in capital expenditure, but the projections for capital expenditure are back within the anticipated norm.

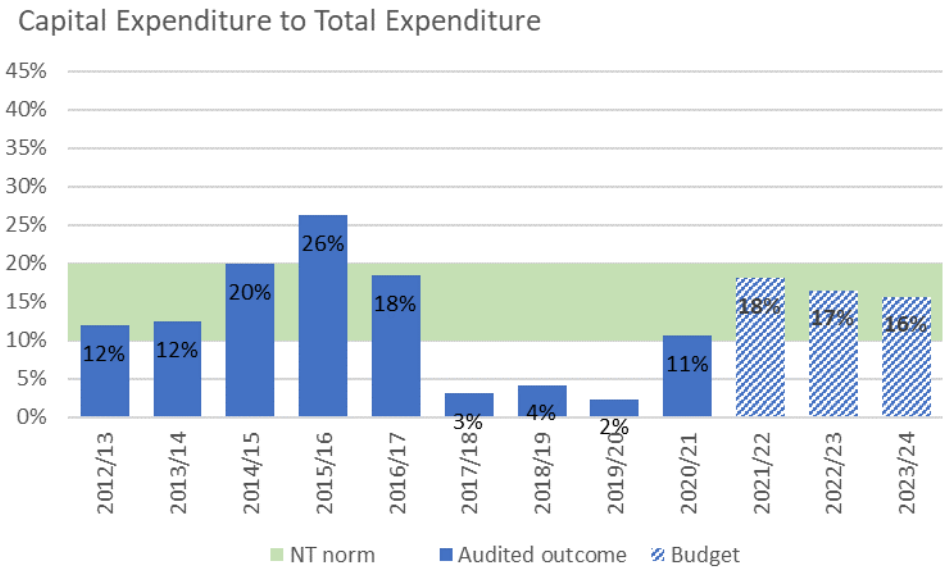

Figure 72: Trend in capital expenditure as a % of total expenditure

The municipality has been heavily dependent on grant funding for its capital programme. Only 10% of the capital programme was funded out of own sources (internal reserves and borrowing) in 2020/21.

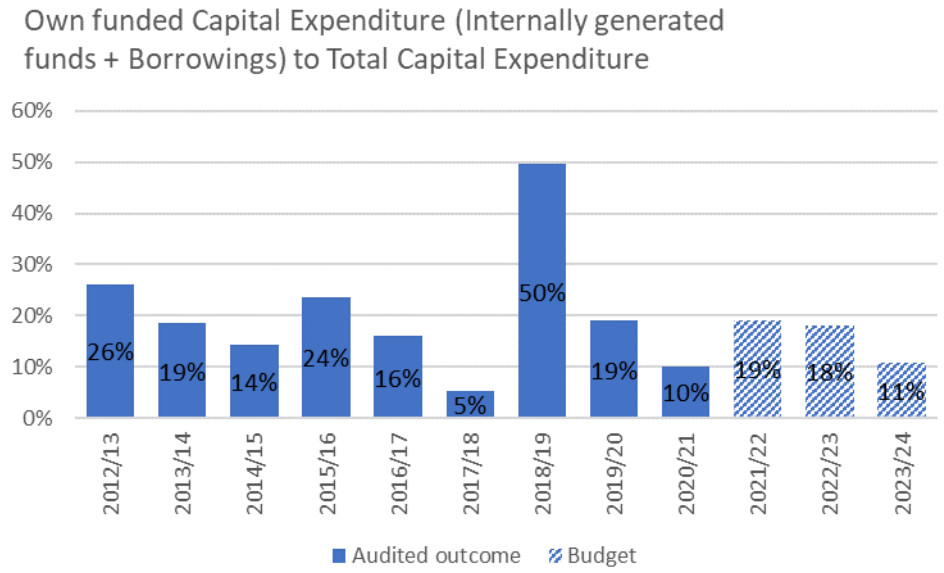

Figure 73: Trend in own source funding as a % of total capital expenditure

Capital budget implementation has been poor, although it seems to have improved recently. This may be an anomaly in the data.

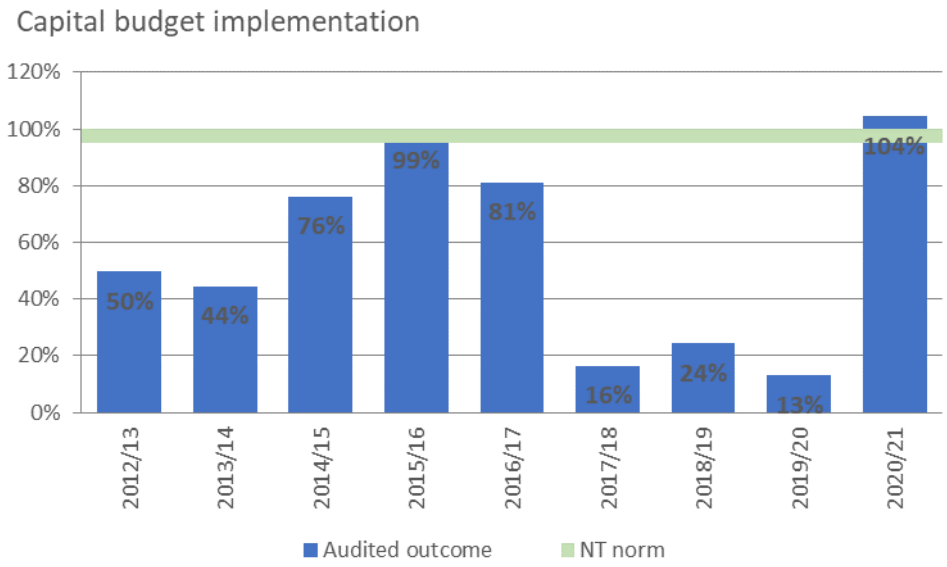

Figure 74: Trend in capital expenditure as a % of budget

Financing the water concessionaire

The Concessionaire uses funds provided by the City as well as their own funds. The way the capital finance obligations are shared in the future is important for the long-term financial plan.

The historic pattern of capital investment in the concession area is shown below. The data is actual figures to 2018, with budgeted figures for 2019 and 2020. The extent to what capital has been invested in the concession area is unknow given that the most recent supplementary agreement has not been signed as of early 2022.

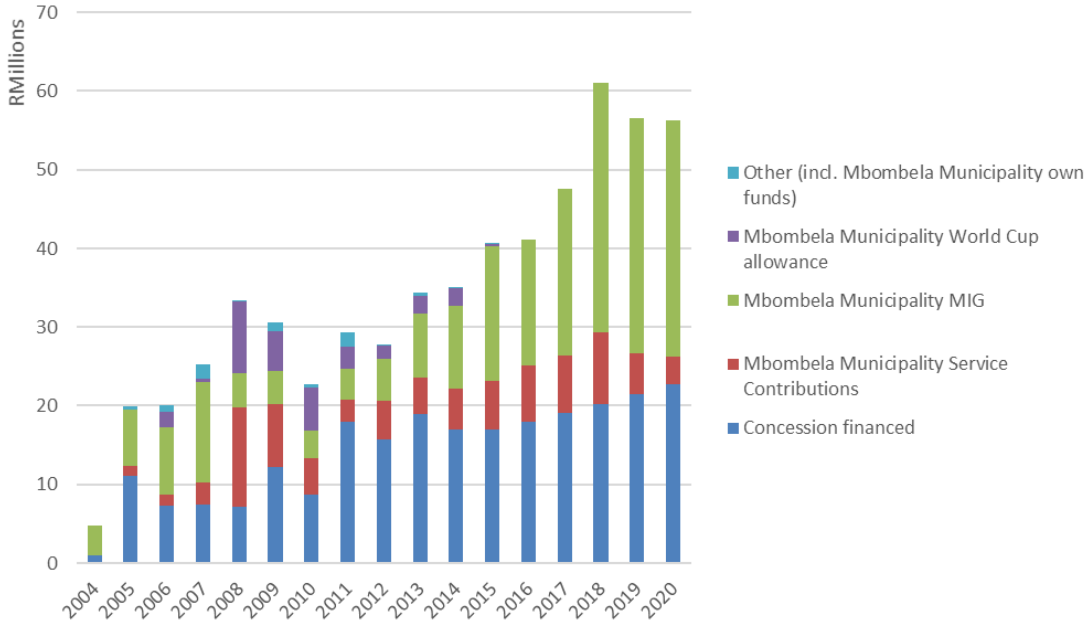

Figure 75: Capital investment in water and sanitation by source (Source: Silulumanzi Capital Plan)

It is clear from the section on the water and sanitation infrastructure that there is severe underspending on infrastructure, in relation to standardised benchmarks.

GOVERNANCE HISTORY

Since 1994, the ANC has been the dominant political party in Mpumalanga with no formidable challenge to its status.

Amalgamation 2016

Prior to the 2016 municipal elections, and because of the of decisions of the Municipal Demarcation Board (MDB), it was determined that the configuration of Mbombela would change, amalgamating Mbombela and Umjindi LMs. The reason for this was to improve the effectiveness and efficiency with which the amalgamated municipalities would be able to deliver services[16].

The development priorities for the new municipality, the City of Mbombela, were-

1. Service delivery: Acceleration of spending on capital projects, water supply interventions, waste management and cleanliness, repairs and maintenance of municipal infrastructure, including integrated human settlements. Noting that Mbombela LM already had a contractual WSP arrangement with the Concession, Silulumanzi.
2. Governance and institutional development: Aligning, integrating, and coordinating the governance arrangements, filling of critical vacancies, risk management, performance monitoring and evaluation, internal audit, system of delegations of powers and functions, and ICT governance.
3. Financial management: Enhancing revenue collection and improving efficiencies of municipal running expenditures and interventions.
4. Improving public transport services, especially from rural areas.
5. Economic development and generating employment, especially for youth.
6. Customer care and public participation.
7. Community and social development.

CoM has four decentralised Regional Service Centres (RSCs) covering the 4 great regions within the municipal area. The purpose of the RSCs is customer service and operational management of service provision.

- The central Region: Service centre to be established in Nelspruit; covering Nelspruit urban area, the Grove, Kanyamazane and Elandshoek.
- The northern Region: Service centre to be established in Hazyview urban area, covering Hazyview, and the northern part of the new Municipal area.
- The eastern Region: Service centre to be established in White River, covering White River urban area, Kabokweni and Malekutu.
- The southern Region: Service centre to be established in Barberton, covering Barberton urban area, Matsulu and Lowville. Note: Umjindi migrated ‘as is’ in the amalgamated structure and became the Southern RSC.

Amalgamation was a significant change to the municipal context resulting in a changed (and greater) spatial, governance, service delivery and socio-economic environment for the municipality.

2013 and 2017 interventions by COGTA

The MEC for Co-operative Governance and Traditional Affairs (COGTA) invoked Section 106 of the Municipal Systems Act (32 of 2000) in September 2013 to the Mbombela Local Municipality due to issues of poor service delivery, allegations of fraud and corruption and institutional governance deficiencies. In 2014 the municipality developed a financial recovery plan to address its financial problems which impacted, amongst others, on its ability to meet its financial commitments. This plan was revised and updated for the expanded City of

[16] Amalgamation is seen as a way to ensure that municipalities are large enough to be financially and technically capable of providing the extensive array of services with which they are mandated. The intention is to ensure that municipalities will reap the benefits of economies of scale, improved coordination of service delivery over their enlarged jurisdiction, and a reduction in the duplication in the delivery of services across local boundaries.

Mbombela, in June 2018. It was identified that there had been little change in the financial position of the municipality in the time between the two financial recovery plans.

In June 2017, within a year after amalgamation, the MEC for COGTA in terms of the Municipal Systems Act and on request of the municipal Council appointed an Acting Municipal Manager (MM) and Acting Chief Financial Officer (CFO). The MEC for COGTA instructed the Acting Municipal Manager to develop and implement a Turn-around Strategy for the municipality, which would include amongst others, a strategy to promote Good Governance and prudent Financial Management.

DISCUSSION ON WSA PERFORMANCE AND THE IMPACT OF CONTEXTUAL AND GOVERNANCE FACTORS

The balance of evidence shows that the City of Mbombela is not performing its functional responsibility for water and sanitation services (as the WSA and in-part WSP) effectively and efficiently. The causal factors include lack of capacity and capability, specifically technical skills; aging infrastructure; poor operations and maintenance; and weak implementation of infrastructure plans and financial budgets.

It is however notable that CoM has a relatively complete suite of suitable policies, strategies, plans, by-laws, delegations' framework, etc. This includes the Water Services Development Plan, Water Master Plan, Bulk Water Supply Strategy, Water Infrastructure Maintenance Plan, Master Plan for Water-borne Sanitation, and a Water Asset Management Plan.

CoM developed a water reconciliation strategy in 2014, which was due to be updated in 2020. The validity of the strategy is to determine an approach and plan to respond to growing water requirements within the municipality, assess the current water availability and surplus/deficit thereof to identify resource management and development options, and recommend and sequence management and structural reconciliation interventions. The options identified such as Water Conservation Water Demand Management (WCWDM), reallocation of water, groundwater development, etc., require uptake and strategic thrusts implemented. Regardless of service delivery arrangement, the reality of water scarcity and the need for more ardent, pragmatic resource management is critical.

Per capita water use in CoM was one of the highest in the country. The Mbombela demand centre had an average consumption of 723 litres per capita per day in 2013. Even in rural areas the average water consumption is higher than in other areas of the country at approximately 200 litres per person per day. The study also identified that there were increasing levels of water demand which meant that available water sources are insufficient to cater for the increased demand (the water demand in the City of Mbombela is increasing at 2.1% per annum). In both catchments it was identified that there are high levels of illegal use of water.

Needs: Reduced water use in the catchment areas and raw water augmentation schemes. There are two dam sites at the pre-feasibility planning phase (Mountain View Dam and Strathmore Off-channel Storage Dam). However little progress has been made on implementing these plans.

State of infrastructure

While the state of water infrastructure in the municipality is generally good, with very little infrastructure in poor and very poor condition, water infrastructure is aging and in the near future will be in need of refurbishment and/or renewal. Over 60% of sanitation infrastructure is either in poor or very poor condition. In particular, the waste-water treatment plants are a concern as they make up the bulk of infrastructure in poor or very poor condition. These assets are also the biggest contributors to sanitation infrastructure risk. The total capital

budget (expansion, renewal and upgrade and refurbishment) in the City of Mbombela is approximately R11.5 million, but it is calculated that approximately R60 million is required per annum to adequately renew and refurbish infrastructure. The data indicates severe underspending. The current operational expenditure budget is R22.6million, which is only 50% of the required operations and maintenance budget, further indicating extensive underspending.

Capacity

The skills and capacity gap are major constraining factors. There are gaps at the technical specialist level, and in operations and planning. Capacity challenges have resulted in a reliance on external service providers to carry out many of the planning tasks, which should ordinarily be performed internally. The current vacancy rate exposes the municipality to high levels of potential risk, ongoing service-related protests as well as financial related setbacks.

Financial performance and position

The City of Mbombela is experiencing a constraint on cash and liquidity. On the expenditure side, the following is of particular note:

- High levels of expenditure on governance and administration.
- Very high use of contracted services.
- Low levels of capital expenditure.

The poor cash position places heavy strain on the municipality's ability to pay its creditors, which are currently at an unsustainable level. The lack of cash has also led to low levels of own-source capital expenditure which has likely resulted in an emphasis on infrastructure for the poor over revenue-generating infrastructure. There are also low levels of capital investment from other service providers in the area.

Management of the Concession contract

The Concession contract provides a relatively successful example of a long-term PPP. A recent 20-year performance review of the PPP found the Concessionaire to be a competent service provider with relatively reliable water provision in the urban area of Nelspruit. This can, in part, be attributed to the influence of a strong and consistent Managing Director of the Concessionaire who established a good, trusting working relationship with the municipality, and stable capacity within the Concessionaire to sustain the quality of services. Over the duration of its contract, the Concessionaire has to an extent protected the provision of water services, i.e. access and continuity of supply, from the broader challenges constraining the municipality.

LEARNINGS FOR REVIEW OF WSA MODEL IN SOUTH AFRICA

This section highlights lessons from this case study as they relate to the WSA model.

Governance

Development and approval of policies, strategies, plans, by-laws, reporting arrangements, as well as proper systems and mechanisms for the management of the WSP contract with the Concessionaire. Coherent decisions about improved and increased levels of access to water and sanitation services, service levels and standards, tariffs, planning and institutional arrangements.

Institutional

Establishing an enabling environment with suitable institutional arrangements that includes-

- A clear policy framework that defines and guides implementation of the WSA function (as stated above)

- More clearly and uniformly demarcate roles and responsibilities of the WSA in relation to WSP operational and provision aspects.
- Signed Service Level Agreements (SLAs) with providers aligned to the WSA policy priorities. The SLA should be the product of an interactive process between the WSA and WSP, which ultimately reflects in a clear distribution of functional responsibilities as set out in legislation and policy prescripts, including performance management and recourse in the case that service standards are not met.
- Mange water services as an integrated business with a clear focus on performance and accountability for performance, including planning, implementation, monitoring, reporting, reviewing and evaluation (MERL).
    - Mechanisms should be used to enhance coordination and inter-relationships, including integration across internal structures and with WSPs.
    - Use of appropriate systems, processes, and procedures to enable this.
- Human resources: Attracting, appointing (critical vacancies), and retaining capable capacity, specifically technical skills.

Regulation

Enhance the WSA regulatory capacity through the development of key performance indicators for measuring WSP performance as well as support the understanding of what is involved and needed for effective regulation. Performance management (KPIs) should be aligned to the internal performance management system for the WSA.

Ensure an institutional mechanism, if not a dedicated structure, to monitor the performance and carry out oversight of the WSP. In the case of CoM, the role of the Contract Management Unit (CMU), its organisational location and understanding of its role as a regulatory unit. PPPs require strong oversight and performance-based contract management capabilities from the WSA.

Financial

Financial management: An appropriate water services budget and financial management approach that is clearly articulated and implemented. This includes a CAPEX Budget where there is prioritisation of critical infrastructure and revenue management. Financial indicators for monitoring and reporting purposes.

REFERENCE LIST

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WSA REVIEW: NGAKA MODIRI MOLEMA CASE STUDY REPORT

BACKGROUND TO THE WSA

The Ngaka Modiri Molema District Municipality (DC38) is situated centrally in the North West, and in 2019 had a population of 961 960. The district covers an area of 28 114 km^2 with a density of 296.3 km^2.

There are five local municipalities (LMs) in the district, namely: Ramotshere Moiloa; Ditsobotla; Tswaing; Ratlou and Mahikeng. The main towns are Mahikeng, Mmabatho, Lichtenburg and Zeerust.

Figure 76: Ngaka Modiri Molema Map

Source: Municipalities (n.d)

There have been no demarcation changes since the municipal boundary was established in 1998. The district was renamed from Central District Municipality to Ngaka Modiri Molema District Municipality (NMMDM) in 2006.

The average household income in 2016 was R14 600 per annum.

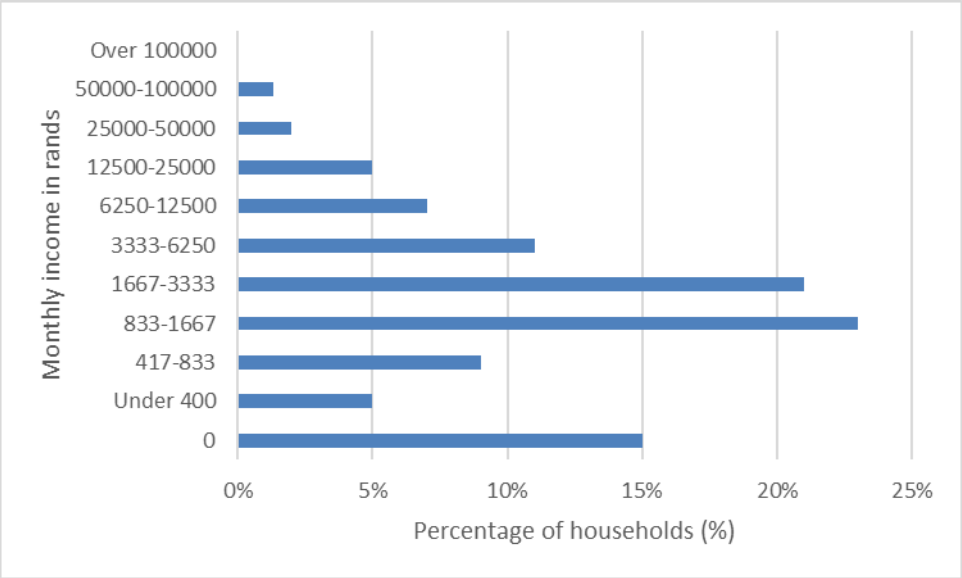

Figure 77: Monthly household income in Ngaka Modiri Molema, 2016

Ngaka Modiri Molema DM operates most of the water and wastewater treatment plants in the district, although some are operated by Magalies Water and some by the LMs. The LMs act as the Water Services Providers (WSPs) to the towns in their respective areas. The District Municipality (DM) is the WSP to the rural and peri urban areas (excluding the commercial farms, which provide their own water services). The district retains ownership of all water services infrastructure, manages the construction of new works and it is responsible for the greater part of the maintenance of its capital works. Capital grants for the construction and upgrading of water services are paid to the District Municipality. Operational grants for the provision of water services are also paid to the District Municipality. A small portion (see Section 3.6, Figure 6) of the operational grant is paid over to the LMs by the DM.

Prior to 1994, water services were provided to much of the district by the Bophuthatswana Department of Water Affairs. After 1994 the Bophuthatswana Department of Water Affairs became Botshelo Water and was managed by the then national Department of Water Affairs (DWA), know the Department of Water and Sanitation (DWS). It was not until after 2011 that the ownership of the infrastructure previously belonging to Botshelo Water was transferred to the district. In 2014, Botshelo Water was disestablished, and its bulk water supply assets were transferred to Sedibeng Water and Magalies Water.

Ngaka Modiri Molema DM has been placed under Section 139 administration four times since 2009. By 2014, NMMDM was in severe financial distress, and it was placed under Section 139 (1)(c) administration where the Council was for a time dissolved. Since 2016, NMMDM's finances have improved significantly. However, as shown in Section 3.4 of this report, the financial health of four of the five LMs within NMMDM remains very poor. This is to a large degree attributed to the burden of having to provide water services in a climate where payment for services is at a very low level.

Figure 3 shows a timeline of the history of NMMDM since 2009.

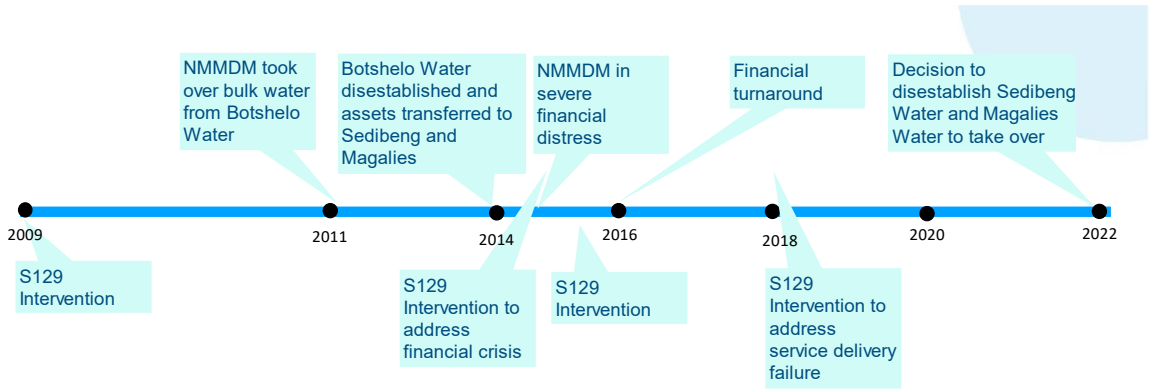

Figure 78: Timeline of NMMDM history from 2009

There were delays in the formalisation of service level agreements (SLAs) between NMMDM and its five LMs[17] and the date on which they were first formalised is unclear. These agreements are redrafted every five years and are reviewed annually. A current priority is the splitting of the SLAs into separate agreements, one for water and one for sanitation, as the WSA/WSP roles differ significantly between these two functions[18]. Sedibeng Water has in the meanwhile been disestablished and all operations transferred to Magalies Water. NMMDM and DWS have entered into agreements with Magalies Water to take over the functions.

WSA SERVICE DELIVERY PERFORMANCE

Water access changes: 2011-2021

The population of NMMDM has grown by an estimated 20% since 2011, but the growth in the number of households is estimated to have grown by as much as 50% (see Table 1). As the household, or at least the homestead, is the unit by which service provision is measured and managed, this has created a significant challenge in terms of service delivery. It should be noted that for Census purposes a household is a social rather than a physical entity, being a group of people who eat together. Therefore, it is possible to have several households sharing one homestead, depending on their arrangements.

Table 32: Changes in the population and the number of households in NMMDM from 2011 to 2021

Year	Population	Growth in population over 5 years	Number of Households	Growth in number of households (5 yrs)	Average household size	Change in average household size
2011	842 699		226 994		3.71	
2016	889 109	5.5%	269 978	18.9%	3.29	-11.3%
2021	1 001 456	12.6%	352 563	30.6%	2.84	-13.7%

The information in Tables 1 to 5 is drawn from StatsSA's 2011 Census, the 2016 Community Survey, and from the DWS Water Services Knowledge System (2021).[19]

[17] Mr Stanley Makhoba, who has been the assistant to the Municipal Manager of NMMDM for approximately 10 years, stated in a verbal interview that the agreements were first formalised in 2012. However, the Report of the Select Committee on Co-Operative Governance and Traditional Affairs on Consideration of the Notice of Intervention Issued in Terms of Section 139(1)(C) of the Constitution In Ngaka Modiri Molema District Municipality, North West Province – dated 15 September 2014, states that "There have been no service level agreements between the District as Water Services Authority and local municipalities and/or Botshelo Water as Water Services Provider (in terms of bulk water; distribution; operations and maintenance; provision of free basic services)".

[18] Stanley Makhoba. Personal communication, 22nd October 2022

[19] Note that – based on these figures – there appears to be an anomaly in the population growth for DC38 between 2016 and 2021. Whereas the number of households grew by 42 974 (19%) in the five year period from 2011 to 2016, it has grown by 82 895

During the RDP programme, access to water was defined as a tap or handpump within 200 metres of the household. Table 2 shows how access has changed from 2011 to 2021 using the RDP definition. By this definition, while the number of households served has increased by 88 827, the percentage of households served has decreased from 74% to 73%. The number of households underserved (served, but at greater than 200 metres) has more than doubled from 26 429 to 63 718, and the number of households not served has remained almost unchanged at 31 000.

Table 33: Changes in access to water supply in NMMDM from 2011 to 2021 using the RDP definition

CENSUS 2011 RDP DEFINITION FOR SERVED	2011 - Census		2016 - CS		2021 - WSKS	
Served (in-dwelling, in-yard and =< 200m)	168 923	74.4%	205 119	76.0%	257 750	73.1%
Underserved (>200m from tap)	26 429	11.6%	40 864	15.1%	63 718	18.1%
No Access	31 642	13.9%	23 986	8.9%	31 095	8.8%
Grand Total	226 994	100.0%	269 968	100.0%	352 563	100.0%

By 2016[20] DWS had adopted a new definition for an acceptable level of service. Those with water in their homes or at least in their yards are counted as served, whereas those who must walk to collect water are counted as underserved. Table 3 shows progress with water services in NMMDM from 2011 to 2021 using this definition. While the number of households served has increased by 36 057, the percentage of households served has decreased from 51% to 43%. The number of households underserved has increased by 90 059, and the number of households with no access is unchanged at 31 000.

Table 34: Changes to access to on-site water supply in NMMDM from 2011 to 2021

HOUSE and IN YARD = SERVED	2011 - Census		2016 - CS		2021 - WSKS	
Served (in-dwelling and in-yard)	116 438	51.3%	128 620	47.6%	152 495	43.3%
Underserved (outside yard)	78 914	34.8%	117 362	43.5%	168 973	47.9%
No Access	31 642	13.9%	23 986	8.9%	31 095	8.8%
Grand Total	226 994	100.0%	269 968	100.0%	352 563	100.0%

Note that the presence of a tap does not mean that the tap has water. StatsSA includes questions about the reliability of the water service in its questionnaires, and these are discussed in Section 2.3 below. NMMDM's Blue Drop scores, rating the safety of its potable water, are discussed in Section 2.4.

Changes in sanitation access: 2011-2021

From 2011 to 2021 the number of households with flush toilets connected to sewers increased by nearly 30 000, from 63 482 to 92 691, an increase of nearly 50%. However, measured as a fraction of the total population, the number of households with flush toilets decreased in this period from 28.0% to 26.3% (Table 4). The number of households with VIP toilets increased from 29 374 to 84 740, an increase of more than 55 000 and an overall increase from 12.9% to 24% of the population.

(31%) from 2016 to 2021. Comparing with data from StatsSA's 2020 General Household Survey it appears that the WSKS data overestimates the population of the North West province by 2% and the number of households by 10%. The WSKS data will be realigned with StatsSA data after the publication of the Census 2022 results.

Table 35: Changes in sanitation service levels, 2011 to 2021

Level of Sanitation Service	2011 - Census		2016 - CS		2021 - WSKS	
Flush toilet (connected to sewerage system) Households	63 482	28.0%	76 563	28.4%	92 691	26.3%
Flush toilet (with septic tank) Household	7 824	3.4%	9 582	3.5%	12 037	3.4%
Pit latrine with ventilation (VIP) Households	29 374	12.9%	55 258	20.5%	84 740	24.0%
Ecological Toilet		0.0%	1 798	0.7%		
Chemical toilet Household	1 527	0.7%	3 318	1.2%	5 376	1.5%
Pit latrine without ventilation Household	100 632	44.3%	110 118	40.8%	135 949	38.6%
Bucket latrine Households	2 768	1.2%	984	0.4%	905	0.3%
No Sanitation Households	17 078	7.5%	10 443	3.9%	20 867	5.9%
Other	4 303	1.9%	1 913	0.7%		0.0%
Grand Total	226 988	100.0%	269 978	100.0%	352 565	100.0%

The DWS and international (Unicef/WHO) definition for acceptable or “improved” sanitation is a flush toilet, VIP toilet or ecological toilet which is not shared with other families. By this definition, 100 680 households had acceptable sanitation in 2011 and by 2021 this number had grown to 189 468, a substantial increase. However, the increase in the *percentage* of the population served has grown by only 9.3%, from 44.4% to 53.7%, and the total number of households with substandard sanitation or no sanitation had increased from 126 000 to 163 000 (Table 5).

Table 36: Changes in access to acceptable sanitation, 2011 to 2021

Level of Sanitation Service	2011 - Census		2016 - CS		2021 - WSKS	
Acceptable: Flush toilets, VIPs and Ecological Toilets	100 680	44.4%	143 201	53.0%	189 468	53.7%
Substandard: Chemical toilets and unimproved pits	102 159	45.0%	113 437	42.0%	141 325	40.1%
Buckets, no sanitation and other	24 149	10.6%	13 340	4.9%	21 772	6.2%
Grand Total	226 988	100.0%	269 978	100.0%	352 565	100.0%

Note that merely having a toilet does not guarantee that sanitation is safely managed. Section 2.5 below discusses the performance of NMMDM’s wastewater treatment plants. As far as on-site sanitation is concerned, very few municipalities in South Africa have any policy, budget or programmes for adequate faecal sludge management, and NMMDM is no exception.

Water supply interruptions: 2011-2016

In the 2011, Census respondents were asked if their water services were subject to interruptions, and whether those interruptions lasted for longer than two days. Using the two criteria to define an unstable water supply, only 61.5% of respondents in NMMDM indicated that their water supply was stable (see Table 6). Further analysis of the data indicates that the reliability of the water supply for those with piped water in-yard or in-house is found to be only 31.3%. Looking at all those supplied with water to within the RDP standard (168 923 homes in 2011) the reliability increases to 45.4%.

Table 37: Reliability of water supply in NMMDM, per Census 2011

2011		
2011 Stability of supply		
Interruptions - YES	68 311	
Interruptions - NO	71 244	
Interruptions > 2 days	54 462	
STABLE ACCESS TO WATER SUPPLY		**2011**
MUNICIPAL WATER SOURCE	139 555	61.5%
RECEIVING STABLE WATER SUPPLY	85 093	61.0%
RECEIVING UNSTABLE WATER SUPPLY	54 462	39.0%
RELIABLE ACCESS TO WATER SUPPLY (house & in-yard)		**2011**
ACCESS TO BASIC WATER SUPPLY (new definition)	116 438	51.3%
RELIABLE ACCESS TO WATER SUPPLY (new definition)	36 419	31.3%
RELIABLE ACCESS TO RDP WATER		**2011**
ACCESS TO BASIC WATER SUPPLY (RDP)	168 923	74.4%
RELIABLE ACCESS TO RDP WATER	76 650	45.4%

In the 2016 Community Survey respondents were asked if their water services were subject to interruptions, whether those interruptions lasted for longer than two days and if those interruptions combined to more than 14 days over a 3-month period. Using these three criteria to define an unstable water supply, only 49.7% of respondents in NMMDM indicated that their water supply was stable, an 11.3% decrease from 2011 (see Table 7). When the data is further analysed the reliability of the water supply for those with piped water in-yard or in-house is found to be only 23.7%. Looking at all those supplied with water to within the RDP standard (205 119 homes in 2016) the reliability increases to 37.7%, a 7.7% decrease from 2011.

Table 38: Reliability of water supply in NMMDM in 2016, per Community Survey of 2016

2016		
2016 Stability of supply		
Municipality	171 465	
Interruption Yes	81 843	
Interruption longer than two consecutive days - Yes	62 794	
More than a 14 days in total over a three month period	23 528	**2016**
MUNICIPAL WATER SOURCE	171 465	63.5%
RECEIVING STABLE WATER SUPPLY	85 143	49.7%
RECEIVING UNSTABLE WATER SUPPLY	86 322	50.3%
RELIABLE ACCESS TO WATER SUPPLY (house & in-yard		**2016**
ACCESS TO BASIC WATER SUPPLY (new definition)	128 620	47.6%
RELIABLE ACCESS TO WATER SUPPLY (new definition)	30 428	23.7%
RELIABLE ACCESS TO RDP WATER		**2016**
ACCESS TO BASIC WATER SUPPLY (RDP)	205 119	76.0%
RELIABLE ACCESS TO RDP WATER	77 387	37.7%

Water quality – Blue Drop score: 2013-2021

When NMMDM's water treatment plants and water distribution systems were assessed under the Blue Drop process in 2013, the outcome was an aggregate score of 30.4%, which was not good (the grade for Blue Drop certification was 90%). This placed NMMDM 134th out of the 152 WSAs assessed at the time.

In 2021, when the process was repeated the outcome was, if anything, worse, but the comparison of scores is not possible since the method for Blue Drop scoring has been changed. A high score is now an indication of high risk, rather than of good performance. Twenty-two of the twenty-six systems assessed were rated at 100% risk, the maximum (worst) possible score. The other four plants, which included the DM's two main water treatment plants, supplying Mmabatho/Mahikeng and Itsoseng/Lichtenburg respectively, were rated at 78.6%, 76.8%, 84.8% and 84.7%, all in the "High Risk" range. The weighted Blue Drop Risk Rating for NMMDM was 82.5%. This placed NMMDM 126th out of the 144 WSAs assessed.

The following quote from the 2022 Blue Drop report provides an indication of the seriousness of the assessment findings for NMMDM:

> Twenty-six drinking water supply systems under Ngaka Modiri Molema DM were assessed. Itsoseng, Dinokana, Mmabatho and Motswedi & Gopane supply systems achieved high-risk ratings. The remainder of the supply systems are in the critical-risk rating category. Only Itsoseng, Dinokana, Mmabatho and Motswedi & Gopane supply systems have design and operational capacity information while the other systems do not have the design and operational capacity information as they are not linked to any boreholes or WTW on IRIS. Unavailability of flow monitoring information can impact on the municipality's planning process and also affect implementation of water conservation and demand management.
>
> With regards to drinking water quality monitoring, no information was provided for all supply systems indicating that water quality monitoring may not be taking place. This presents serious health risks to the consumers as the quality of water supplied from these systems cannot be verified or guaranteed. Therefore, the WSA and WSPs are urged to urgently address this to reduce the health risks to the consumers. (DWS 2022b)

Wastewater performance – Green Drop score: 2013-2021

As with the Blue Drop assessment, NMMDM's Green Drop scores have not been good. In 2011 NMMDM's aggregate Green Drop score was 28.4%. In 2013 it was 17.78%. In 2021 it was 5%. Ninety percent is the score required to achieve Green Drop status. Only 5 other WSAs in South Africa performed as badly, and they were all small LMs with just three or four wastewater treatment plants. Tables 8 and 9 show the Green Drop ratings of NMMDM's 13 wastewater treatment plants in 2013 and 2021, respectively.

Table 39: Summary of NMMDM's Green Drop scores for 2013

Plant Name	System Design Capacity (Ml/d) 2013	Design Capacity Utilisation 2013	Daily Volume Treated 2013	Green Drop Score 2013
Atamelang	NI	NI		25%
Coligny	NI	NI		4%
Delareyville	4	50%	2.00	15%
Itsoseng	NI	NI		12%
Lehurutse	1.5	NI		33%
Lichtenburg	NI	NI		8%
Mafikeng/Mahokeng	8	NI		27%
Mmabatho	24.5	49%	12.01	22%
Ottosdal	NI	NI		1%
Sannieshof	NI	NI		1%
Zeerust	4.5	96%	4.32	28%
Groot Marico				
Itekeng Ponds				

Table 40: Summary of NMMDM's Green Drop scores for 2021

Plant Name	System Design Capacity (Ml/d) 2021	Design Capacity Utilisation 2021	Daily Volume Treated 2021	Green Drop Score 2021
Atamelang	1	133%	1.33	0%
Coligny	2	200%	4.00	0%
Delareyville	4	75%	3.00	0%
Itsoseng	3	133%	3.99	0%
Lehurutse	1	138%	1.38	0%
Lichtenburg	20.5	144%	29.52	0%
Mafikeng/Mahokeng	4.5	222%	9.99	0%
Mmabatho	24.5	41%	10.05	0%
Ottosdal	3	135%	4.05	0%
Sannieshof	1	279%	2.79	0%
Zeerust	3.5	93%	3.26	0%
Groot Marico	0.8	110%	0.9	0%
Itekeng Ponds	0.6	279%	1.5	0%

WSA FINANCIAL PERFORMANCE

Audit performance

According to the National Treasury Department's "Municipal Money" website NMMDM received an audit disclaimer in 2017/18 and adverse opinions in two of the three years since. A disclaimer is serious, but an adverse opinion is not necessarily critically important.

Availability of financial records

NMMDM was established after the 2001 local government elections. The first year for which financial records were available was 2001/2002. Financial records for NMMDM are available for all but two of its first twenty years of existence (2004 and 2008). However, it was not until 2011 that the assets of Botshelo Water were transferred to NMMDM. It is the period 2011 to 2022 that is of greater interest and relevance in seeking to understand the state of NMMDM's finances.

Financial performance

Municipalities are required to show the value of all their fixed assets (i.e. property, plant, and equipment) on their balance sheets. However, almost all these assets cannot be sold or used in any way to secure loans or clear debt, so their inclusion does tend to obscure the true state of a municipality's finances. Of more interest and relevance is the municipality's Current Assets vs its Current Liabilities. Current Liabilities are debts and obligations which are due and payable at the time of the statement. Current Assets are cash in the bank plus money that is owed to the municipality, which it has a reasonable expectation of receiving within the next three months or so. The difference between these two is the Net Current Assets, and the ratio of current assets to current liabilities is its Current Ratio.

Figure 4 shows the trend in NMMDM's Current Assets and Current Ratio over the period 2009 to 2022. From 2010 to 2016, there was a steep decline in NMMDM's financial health. By 2016, the municipality's Current Assets were negative R507 million, and its Current Ratio was 20%. At that point, NMMDM was functionally insolvent. Since 2016, the municipality's finances have improved remarkably. By 2021, the Net Current Assets had risen to R451 650 874, an improvement of nearly one billion rand since 2016. By 2021 NMMDM's Current Ratio had risen to above 2, which is a commonly used benchmark indicating a business in sound health, at least financially speaking.

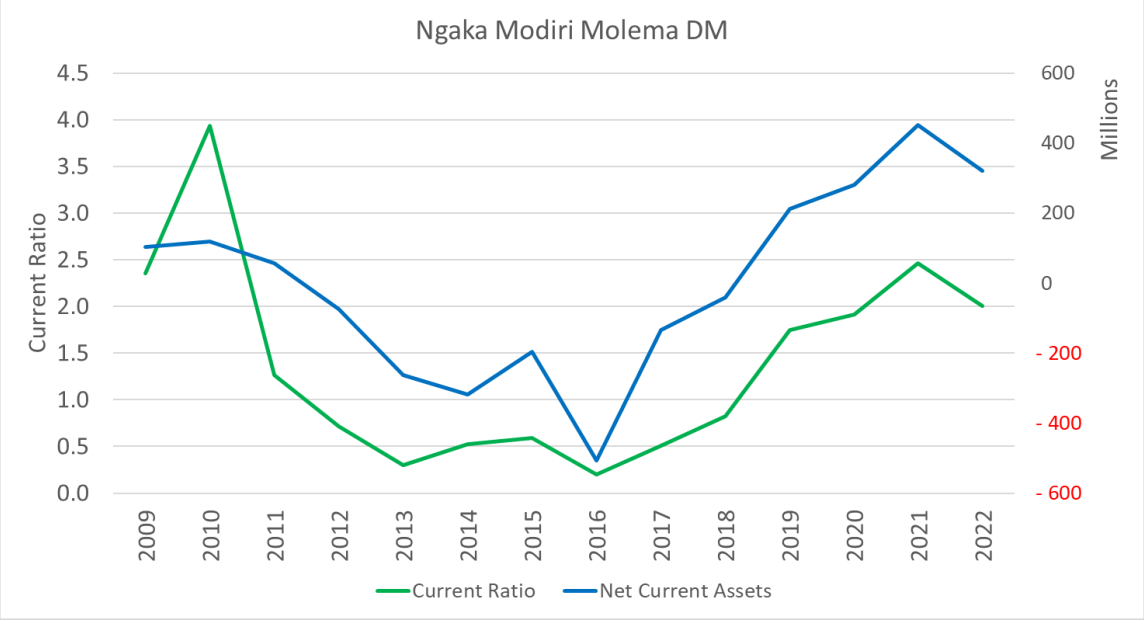

Figure 79: Current Assets and Current Ratio for NMMDM for the period 2009 to 2022

Looking at the records to try to determine what could have resulted in such a positive turnaround in NMMDM's finances, three things stand out. Firstly, the wage bill, adjusted for inflation, has not increased since 2015. Most other municipalities have seen a significant increase in their wage bills over the same period. Secondly, the amount of funds received from national government for Operational Grants has increased dramatically. Adjusted for inflation, the amount received in 2016 was R626 million, while that received in 2021 was R921

million. Thirdly, while in the five years prior to 2016 the municipality transferred an average of R62 million per year to the LMs as operational grants and subsidies, for the four years after 2016 these transfers were limited to an average of R10 million per year[21]. These trends are illustrated in Figure 5.

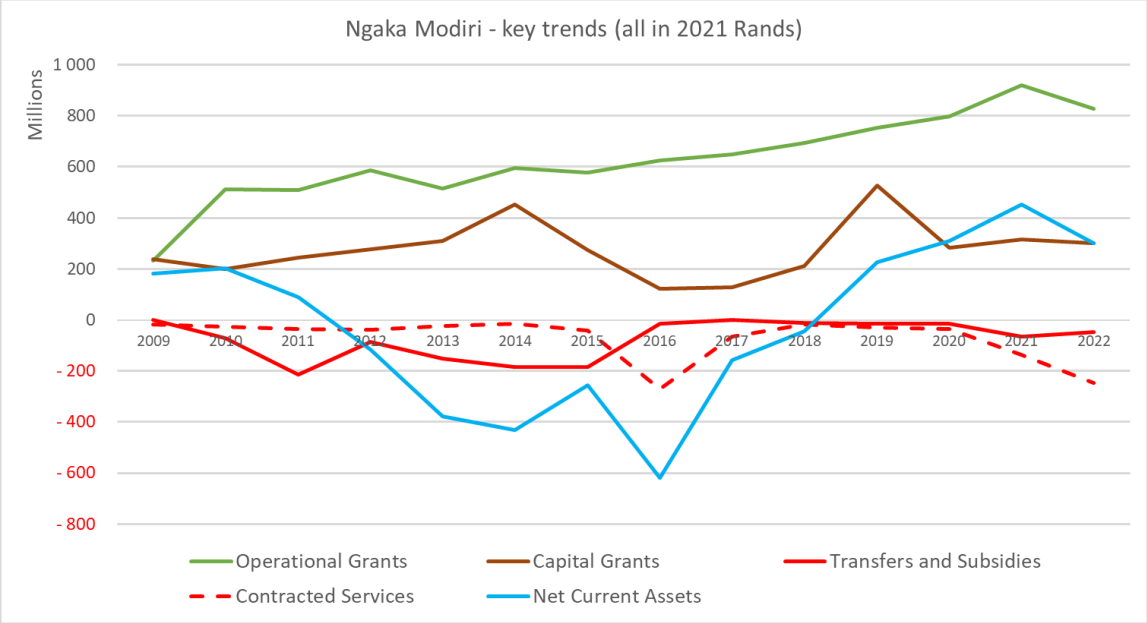

Figure 80: Trends in NMMDM finances from 2009 to 2022

Financial performance of Local Municipalities within NMMDM

To assess the success or otherwise of NMMDM's WSA/WSP arrangements, it is necessary to examine the financial health of the five local municipalities to whom NMMDM delegated the WSP function. Table 10 shows the financial position of NMMDM and the five LMs in 2021.

Table 41: Financial status of the five LMs in DC38, 2021 financial year

2021 Financial Year	MAHIKENG	DITSOBOTLA	TSWAING	RAMOTSHERE-MOILOA	RATLOU	Combined LMs
Current Assets	131 809 512	493 396 337	298 114 401	163 194 624	102 145 253	1 188 660 127
Cash and Cash Equivalents	40 948 096	14 489 678	1 080 282	16 724 762	62 146 503	135 389 321
Current Liabilities	496 903 104	1 122 028 549	295 004 226	163 817 059	43 821 576	2 121 574 514
Net Current Assets	-365 093 592	-628 632 212	3 110 175	-622 435	58 323 677	- 932 914 387
Current Ratio	27%	44%	101%	100%	233%	56%
Liquidity Ratio	8%	1%	0%	10%	142%	6%

As reflected in Table 10, four of the five LMs performing the WSP function in DC38 are in dire straits. Ratlou is the notable exception, but Ratlou has no significant towns. This suggests that it likely does not provide WSP services to any meaningful degree. Note that the Liquidity Ratio (as calculated in Table 10) is the ratio between an organisation's cash and cash equivalents (i.e. readily available or "liquid" assets) and its current liabilities.[22] At 8%, 1%, 0% and 10%, the Liquidity Ratios for the four LMs providing water services is very poor.

As the LMs do provide other services, such as the sale of electricity, the numbers in Table 10 do beg the question, to what extent is the state of the LMs due to the burden imposed by the provision of water services, and to what extent is it more general?

[21] In 2021 and 2022 the transfers have been R65 million and R51 million respectively.

[22] Accountants use several different liquidity ratios to describe the health of a business. Cash and Cash Equivalents divided by Current Liabilities is more correctly known as the Absolute Liquidity Ratio.

Table 11 shows the amounts owed to each of the LMs for water services. As can be seen, the total owed to the LMs for water and sewage on 30 June 2021 was over R1.8 billion, or which more than R1.7 billion was more than 120 days in arrears. The LMs have impaired R1.5 billion of this debt in their books, which is probably not enough. It would be more realistic to impair the full >120-day amount. Correcting for the increased impairment, the combined Net Asset position of the four LMs providing water services comes to negative R1 159 732 325 (Table 12). Their combined Liquidity Ratio was at the time 4%, which is extremely unhealthy. If their financial position is combined with NMMDM to provide a wholistic picture of water services within DC38, the financial circumstance is somewhat improved, with a Current Ratio of 71% and a Liquidity Ratio of 29%. This is still not close to healthy.

Table 42: Breakdown of water and sewage debt for the DC38 LMs which provide water services

2021 Financial Year	MAHIKENG	DITSOBOTLA	TSWAING	RAMOTSHERE-MOILOA	Combined LMs
Water Debtors Unimpaired	714 038 984	427 281 581	44 278 013	150 249 164	1 335 847 742
Sewage Debtors Unimpaired	178 859 492	179 618 959	80 422 737	31 243 014	470 144 202
Water Debtors Impairment per AFS	687 700 731	426 162 649	16 134 908	14 247 686	1 144 245 974
Sewage Debtors Impairment per AFS	169 139 135	162 111 690	29 306 045	0	360 556 870
Water Debtors in AFS	26 338 253	1 118 932	28 143 105	136 001 478	191 601 768
Sewage Debtors in AFS	9 720 357	17 507 269	51 116 692	31 243 014	109 587 332
Water Debtors > 120 days	702 143 331	398 368 852	41 688 566	146 115 389	1 288 316 138
Sewage Debtors > 120 days	174 349 280	163 506 531	74 652 098	30 796 735	443 304 644
Water Debtors with realistic impairment	11 895 653	28 912 729	2 589 447	4 133 775	47 531 604
Sewage Debtors with realistic impairment	4 510 212	16 112 428	5 770 639	446 279	26 839 558
Implied correction to Current Assets	-19 652 745	26 398 956	-70 899 711	-162 664 438	-226 817 938

Table 43: The wholistic water services financial picture in DC38 – DM plus LMs (excluding Ratlou)

2021 Financial Year	NGAKA MODIRI	Combined LMs	DM plus LMS
Current Assets	760 536 053	961 842 189	1 722 378 242
Cash and Cash Equivalents	580 811 567	135 389 321	716 200 888
Current Liabilities	308 885 179	2 121 574 514	2 430 459 693
Net Current Assets	451 650 874	-1 159 732 325	-708 081 451
Current Ratio	246%	41%	71%
Liquidity Ratio	188%	4%	29%

Spending on repairs and maintenance

While NMMDM has delegated the WSP function in urban centres to its LMs, it does still carry out a certain amount of maintenance, funded by the operational grants it receives from national government. As can be seen in Table 13, the amount spent on repairs and maintenance varies considerably from year to year. The guideline which is frequently quoted in public discourse, and which is promoted by the National Treasury department, is that municipal spending on repairs and maintenance should be approximately 8% of the book value of their property, plant, and equipment.[23] Judged against this standard, NMMDM's maintenance spending from 2014 to 2021, which averaged just 1% of the value of its property plant and equipment, was far

[23] The validity of this guideline can be debated. 8% is far too high for an asset like a reservoir or a pipeline, but not high enough for mechanical and electrical equipment. Also, the values of property, plant and equipment quoted in the audited financial statements are depreciated values, not replacement values. The replacement values are much higher than the book values. While an 8% budget for maintenance is excessive for most assets at their new value, it is perhaps not unreasonable for assets that are more than 20 years old, which is the case for a lot of municipal infrastructure. This is an area which requires a lot more investigation.

too low. Notable is that this spending almost quadrupled from 2021 to 2022, possibly spurred by NMMDM's very poor outcomes in the 2021 round of Blue and Green Drop assessments.

Table 44: Repair and Maintenance spending (2021 Rands)

Year	Value of Property, Plant and Equipment	Repairs and Maintenance	Repairs and Maintenance /Fixed Assets
2014	6 688 550 082	46 834 407	0.7%
2015	6 232 131 101	55 621 000	0.9%
2016	4 478 770 936	78 307 777	1.7%
2017	5 220 691 100	32 397 776	0.6%
2018	5 531 762 050	11 044 079	0.2%
2019	5 445 686 744	62 270 537	1.1%
2020	5 226 166 106	72 161 368	1.4%
2021	5 107 885 814	50 760 454	1.0%
2022	4 907 649 467	186 553 263	3.8%

Sources of Revenue

NMMDM derives 97% of its revenue from National Grants. The percentage is particularly high as it does not charge for any water services, having transferred that function to the LMs along with the WSP responsibility. Since 2016, NMMDM does, however, keep more than 90% of the operational grants provided by national government (Figure 6), even though, arguably the greater part of the operating burden is borne by the LMs and not the DM. This goes some way to explain why NMMDM is in robust financial health whereas the LMs (except for Ratlou, which does not have a significant WSP function) jointly have net current assets of negative R1.2 billion and a joint Liquidity Ratio of 4%, i.e. they are very constrained in their ability to conduct business. The amount of operational grant paid by NMMDM to the LMs is a point of contention. In 2018, 2019 and 2020, only 2% of the grants were transferred to the LMs combined. In 2021 and 2022, the share has increased from 6% to 7% (see Figure 6). Evidently NMMDM is waiting for the LMs to submit their indigent registers to justify a greater share of the operational grant.[24]

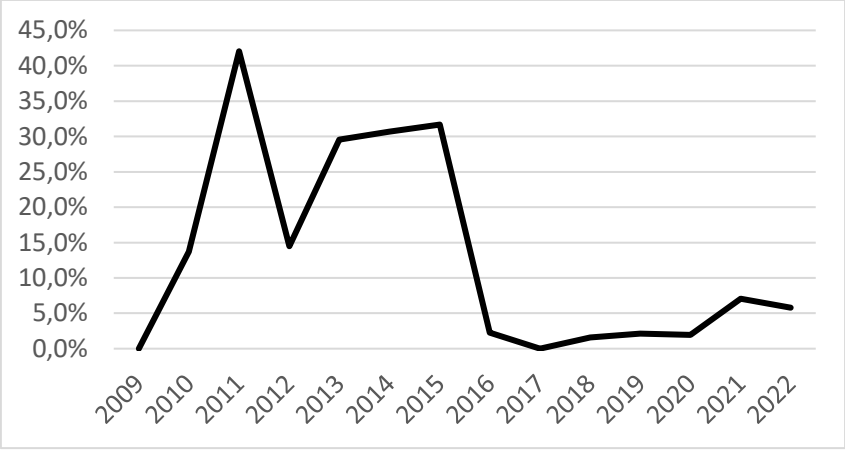

Figure 81: Transfers and Subsidies paid out as a percentage of Operational Grants received

Staff wages and salaries

NMMDM has maintained a constant staff wage bill over the last eight years (see Table 14). Many other Category C2 DMs in South Africa have seen their wage bill escalate sharply over the same period. The number

[24] Stanley Makhoba, personal communication, 23 October 2022

of staff has also decreased by 30% since 2016, which was the year NMMDM was at its lowest point financially. This decrease in staff may to some extent explain the improvement in NMMDM's financial position since 2016. The average cost of staff, measured in 2021 rands, has escalated from R300 000 in 2015 and 2016 to R400 000 in 2021 and 2022. This may reflect a changing staff composition, with more skilled staff and less general staff, which would be consistent with the DM's function being asset management oriented as opposed to the operation of water services.

Table 45: NMMDM trends in staff numbers and costs (all in 2021 Rands)

Year	Population Served	Number of Staff	Number of Staff per 1000 people	Average cost of Staff (2021 Rands)	Cost of Employees (2021 Rands)
2015	879 827	1 239	1.41	318 047	394 060 702
2016	889 109	1 303	1.47	275 970	359 589 435
2017	901 287	1 056	1.17	342 100	361 257 977
2018	913 465	1 178	1.29	292 692	344 791 391
2019	925 644	732	0.79	484 299	354 506 629
2020	937 822	810	0.86	458 196	371 139 031
2021	950 000	900	0.95	429 537	386 583 161
2022	960 000	992	1.03	382 934	379 870 109

GOVERNANCE HISTORY

The ANC has been the dominant political party in the North West since 1994, and there have been no serious threats to its status, even as its fortunes have declined elsewhere in South Africa since that time.

NMMDM and its five LMs have been placed under administration repeatedly since they commenced operations twenty years ago (see Figure 7). In fact, this may well be the most intervened-in municipal jurisdiction in South Africa. The number and length of these interventions has also been growing. During the July 2018 to June 2020 period, all six municipalities were under administration at some point, with the average period being longer than 12 months, i.e. more than 50% of the time.

The outcomes-based utility of the interventions is questionable. For example, NMMDM was so cash-strapped by June 2014 that it was scarcely able to function. In July 2014, it was placed under administration, which remained for all but two of the subsequent 26 months and was released in August 2016. There was a marked turnaround in NMMDM finances in 2016, which may be the positive result of the intervention at that time.

NMMDM was placed under administration again in September 2018, which lasted until December 2019. This last period of administration was, however, more about improving service delivery outcomes than about rescuing NMMDM's finances.

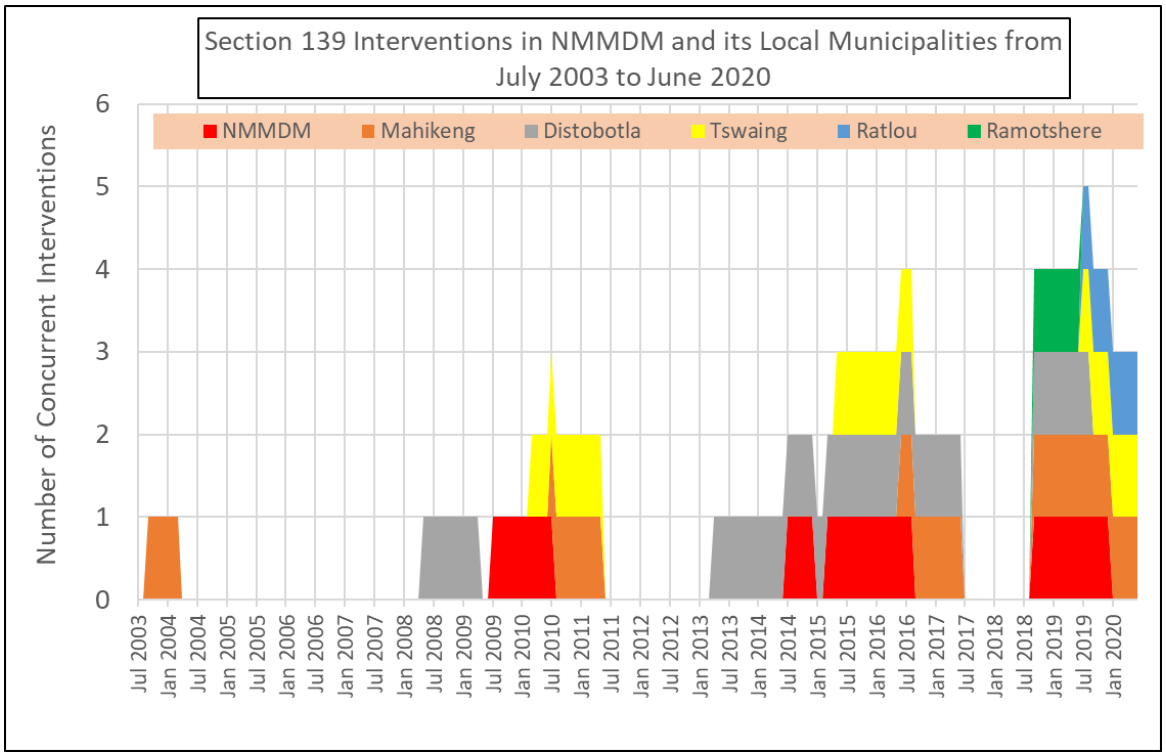

Figure 82: Timeline showing Section 139 Interventions in NMMDM and its LMs, from 2003 to 2020

In 2021 the North West Province's MEC for Local Government, Mr BT Moiloa, presented a report on progress and achievements with the various Section 139 interventions which had been made in the province since 2019. In this report he listed the following lessons from previous interventions (i.e. pre-2019 interventions):

i) Increase in challenging interventions in the courts of law by councils as they view that the process to intervene was not properly followed.
ii) Municipalities are opposed to interventions utilising the provisions of section 139 (1) (b) of the Constitution debating that an administrator is required for 139 (1)(c) only.
iii) Municipal Councils' view intervention as settling political scores rather than providing additional support through section 139 of the constitution.
iv) Municipalities accuse the Provincial Department of not following proper processes before invoking sections 139 of the constitution.
v) Section 139 of the Constitution Interventions are mostly unsuccessful because when implemented they don't enjoy support of councils and improvement to systems are discarded immediately the Administrators leave.
vi) By the time intervention happens municipalities are already bankrupt, and in dysfunctional state, and there are no funds to sustain the turn-around plan by the administrator, even at province budget is only provided for cost of employment for the administrator and team no capital budget, etc. funded.
vii) Silent resistance by both Municipal Councils and Administration which influenced the necessary support the Intervention Team requires.
viii) Inadequate resourcing of the Intervention by the Provincial Government due to financial constraints.
ix) Poor Management of the authority between the Administrator, Council and Accounting Officers.
x) Timing of the interventions impacted negatively on alignment of the municipal resources and the proposed intervention plans by the Intervention Team.
xi) Failure by municipalities to implement the recommendations presented through the Close Out Reports.
xii) Reversing the progress made during interventions by rescinding some of the key decisions taken by the Administrator.[25]

These lessons show that Section 139 interventions are a mechanism that has had limited impact in rescuing and turning around municipalities in collapse.

[25] Progress Report on the Implementation of Section 139 (1) (B) of the Constitution in Identified Municipalities in the Province Select Committee on Co-operative Governance and Traditional Affairs: NCOP. Presented by: MEC BT Moiloa, 2021

DISCUSSION ON WSA PERFORMANCE AND THE IMPACT OF CONTEXTUAL AND GOVERNANCE FACTORS

Given the results of the recent Green and Blue Drop assessments, the dire state of the finances of the local municipalities which provide water services within the jurisdiction of NMMDM, the falling reliability of water supplies and the frequent service delivery protests that this part of South Africa is known for, NMMDM cannot be considered a success story or an example to emulate.

One of the factors that affects cost recovery is the poor reliability of services. People argue that they should not have to pay for services that are erratic. However, with lack of income, WSPs struggle to improve the reliability of the services provided, and thus a vicious cycle is established[26].

Another factor that affects payment is that more and more people have taken to building homes in rural areas outside of towns. There is a general expectation that services in rural areas, which tend to be of a lower standard (VIP latrines and shared standpipes or yard taps) should be free regardless of how much water is used[27].

LEARNINGS FOR REVIEW OF WSA MODEL IN SOUTH AFRICA

There is no inherent reason why the WSA/WSP model adopted by NMMDM should not have worked. However, no management system works without good leadership backed by strong political will. Clearly, both have been lacking within NMMDM over much of the last 20 years. While delegation is a foundational management principle, abdication is not delegation. It does appear that NMMDM has to some extent over the years abdicated its WSA leadership responsibilities and left the local municipalities to fend for themselves.
Some key points that emerge from this preliminary, high-level review are the following:

i. The provision of water services drains municipal finances. Those LMs within DC38 that have a WSP function are cash-strapped to an extent that they struggle to provide services. Those that do not (Ratlou and NMMDM itself, which has a more limited WSP function) are in robust financial health.

ii. It is impossible to provide water services in a climate in which it is acceptable to not pay for water services and where the enforcement of payment is weak. This problem has become more and more marked over the last 20 years and now poses an existential threat to the future of water services in South Africa.

iii. The delegation of water services by the WSA to WSPs only works with a fair distribution of income, costs, and risks. In this case, with the DM retaining more than 90% of the operational grants provided for water services and the LMs carrying a large share of the WSP responsibility, an equitable and fair balance does not appear to have been achieved.

iv. The problem of people not being willing to pay for, or at least not feeling any compunction in not paying for poor quality services creates a vicious spiral. The more WSPs are deprived of operating cash, the more they struggle to provide good quality services, and thus payment levels decrease even further.

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