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Who governs Johannesburg Water?

An Actor-Network reading of water services governance in the City of Johannesburg (2000-2018)

Darlington Mushongera

A thesis submitted to the Faculty of Engineering and the Built Environment, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the degree of Doctor of Philosophy (Town and Regional Planning)

Johannesburg, 2022

Declaration

I declare that this thesis is my own unaided work. It is being submitted to the Degree of Doctor of Philosophy to the University of the Witwatersrand. It has not been submitted before for any degree or examination to any other university.



……

(Signature of Candidate)

02……..day of.....March……. 2022

Dedication

To my late parents, James Chifamba (1924-2017) and Joyce (1936-2021) Mazazi. I was their son!

Acknowledgements

I give thanks to God, the Almighty for the gift of life, the strength, and the inspiration to have seen this project to completion – *Soli Deo Gloria*! Without Him, we can do nothing. Special thanks also go to my supervisors, Professors Richard Ballard and Claire Béenit-Gbaffou who walked with me all the way and convinced me that this was a journey worth taking and indeed, it was. Thank you both for the guidance, insightful comments and probing questions that sustained this project. Richard, thank you for instilling confidence in me. I am forever grateful to Melanie Samson who introduced me to state theory during a PhD proposal-writing course at the Public Affairs Research Institute (PARI) 2004. I owe my sincere gratitude to Professor Claire Bénit-Gbaffou who initiated and directed the Practices of State in Urban Governance programme of which this PhD immensely benefited. Claire, your zeal and courage to make me an analytical thinker have been realised. I thank you endlessly. My fellow students in the PSUG, Dr Mamokete Matjomane, Kate Tissington, and Nqobile Malaza, Boitumelo Matlala, and many others who were part of this great initiative, thank you for your support. Many thanks to the National Research Foundation (NRF), the funders of the PSUG programme. I am also very grateful to Glyn Williams at The University of Sheffield, who organised the Newton PhD exchange programme which I was privileged to be part of and met excellent academics such as Dr Glyn Williams, Dr Paula Meth, Dr Steve Connelly, and many others from Sheffield including PhD students. My sincere appreciation and special thanks to my employer, the Gauteng City-Region Observatory (GCRO), for generously granting me the opportunity to pursue this degree as part of my work: Rob Moore, Graeme Götz, and Rashid Seedat, thank you very much! Special thanks to Graeme Gotz, for sharing insightful knowledge on Johannesburg and for sharpening my ideas on this project.

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Table of Contents

Contents

Declaration i
Dedication ii
Acknowledgements iii
Table of Contents iv
Table of Figures ix
Table of Tables ix
List of Abbreviations x
Abstract xi
CHAPTER 1 INTRODUCTION 13
1.1 Context 14
1.2 Introducing the case study 17
1.2.1 The legislature and executive 17
1.2.2 Water services sector 18
1.2.3 The objectives of the water sector 19
1.3 Research puzzle and motivation 20
1.3.1 Research questions 20
1.3.2 The sub research questions include 21
1.4 The main argument of the thesis 21
1.5 Water services governance in the City of Johannesburg 22
1.5.1 Regulation 22
1.5.2 Water Services in the South African context 23
1.6 Analysis framework in brief 24
1.6.1 Actor-Network Theory 24
1.6.2 New Public Management 25
1.6.3 Real governance 26
1.7 Research dimensions 27
1.8 A note on the methodology and structure of thesis 28
1.8.1 Research design 28
1.8.2 The organisation of the thesis 29
2 ACTOR-NETWORK THEORY 30
2.1 Actor-Network Theory 30
2.1.1 What is Actor-Network Theory? 31
2.1.2 The terminology of ANT 32
2.1.3 The methodology of ANT 33
2.2 The concept of translation in ANT 34
2.2.1 Factors affecting translation 34
2.2.2 Advantages of using ANT 35
2.2.3 Value of ANT in governance 37
2.2.4 Responding to critiques of ANT 39
2.3 Applying ANT 40
2.3.1 Modifying ANT to suit case study 40
2.3.2 Countering the criticism of ANT 41
2.4 Conclusion 43
3 NEW PUBLIC MANAGEMENT AND WATER SECTOR REFORM IN SOUTH AFRICA 44
3.1 What is New Public Management? 45
3.1.1 The rise of NPM 47
3.1.2 The theoretical basis of NPM 48

3.1.3 The basic tenets of NPM 49
3.1.4 Paradoxes, limitations and criticisms of New Public Management 50
3.2 NPM and South Africa 53
3.2.1 New Public Management in Africa 54
3.2.2 New Public Management in South Africa 55
3.3 Governance 57
3.3.1 Authority and Power 58
3.3.2 Deficiencies of the state 59
3.3.3 Water governance reforms 59
3.4 New public management in the water sector 60
3.4.1 Corporatisation 60
3.4.2 Regulation 62
3.4.3 Challenges of corporatisation and regulation 64
3.5 Examples of regulation in the water sector 65
3.5.1 Australia 65
3.5.2 U.K./Brazil 65
3.5.3 South Africa 66
3.6 Conclusion 66
4 RESEARCH STRATEGY, METHODS AND THE POLITICS OF CHOICE 68
4.1 Introduction 68
4.1.1 My story 68
4.1.2 Ethnography 71
4.1.3 Limitations of institutional ethnography 72
4.1.4 Positivism and social constructivism (deductive and inductive reasoning) 73
4.1.5 Choosing the research site 73
4.2 Accessing the field 74
4.2.1 Snowballing 75
4.2.2 Dissecting the research site 77
4.2.3 The organisation 77
4.2.4 The group: Environment and Infrastructure Services Department (EISD) 78
4.2.5 The individual: the officials 79
4.2.6 Positionality 79
4.2.7 Ethics of fieldwork 80
4.3 Primary data collection 80
4.3.1 Phases of the research 81
4.3.2 Sites of data collection 83
4.4 Data collection methods 84
4.4.1 Participant observation 84
4.4.2 Document analysis 86
4.4.3 Miscellaneous methods 90
4.5 Data analysis 91
4.5.1 Embedded analysis 91
4.5.2 Transcribing 91
4.5.3 Coding 91
4.6 Conclusion 92
5 INSTITUTIONAL REFORM IN THE CITY OF JOHANNESBURG 2000-2016 94
5.1 Introduction 94
5.2 Local Government reform in South Africa 94
5.2.1 The White Paper on Local Government 95
5.2.2 The National treasury department 95
5.2.3 Municipal Systems Act and the Municipal Finance Management Act 98

5.2.4 Challenges of institutional change in South Africa 99
5.2.5 Challenges for local government 99
5.2.6 Challenges for the water sector 100
5.3 Developments at the City level 101
5.3.1 Amalgamation 101
5.3.2 Financial crisis and the solution 102
5.3.3 The 2000 local government elections and restructuring in Johannesburg 102
5.4 The relationship between the City and the Water Company 103
5.4.1 The contract-client split and the principal-agent problem 103
5.4.2 Equity-efficiency dilemma 103
5.4.3 The Contracts Management Unit 104
5.4.4 The paradoxes that confronted the CMU 107
5.4.5 The Shareholder Unit (SHU) and tension resolution 109
5.4.6 Service Delivery Agreements 109
5.4.7 SDA content of deliveries expected of JW by City 110
5.5 Administrative changes in Johannesburg since 2000 111
5.5.1 The first electoral term (2000-2006) 112
5.5.2 The second electoral term (2006-2011) 114
5.5.3 The third mayoral term (2011-2016) 116
5.5.4 Corporate governance and the Group Approach 118
5.5.5 Cluster Mayoral Subcommittees 120
5.5.6 Outcomes-based approach 122
5.5.7 Accountability in the water sector 122
5.6 Conclusion 123
6 THE EXISTING GOVERNANCE LANDSCAPE AND WATER SERVICES GOVERNANCE IN THE CITY OF JOHANNESBURG 124
6.1 Johannesburg Water 125
6.1.1 The nature of JW 126
6.1.2 Board of directors 126
6.1.3 The managing director 127
6.2 Set of practices JW adopts 128
6.2.1 Board of Directors' meetings 128
6.2.2 Planning and reporting 130
6.2.3 The governance agency of the board 131
6.2.4 Challenges facing Johannesburg Water 134
6.3 City of Johannesburg – An encounter 136
6.3.1 Initial encounter with the City 136
6.3.2 Questions emerge 136
6.3.3 The City – a multiplicity of components 137
6.4 The political arm 138
6.4.1 The Council 140
6.4.2 Council sub-committees 142
6.4.3 The Member of Mayoral Committee as political heads of Departments 143
6.4.4 Appointment of Board Members of Johannesburg Water 144
6.4.5 Political party debates 145
6.5 The executive arm of the city 146
6.5.1 The executive mayor 146
6.5.2 Mayoral practices for enrolling members into an actor-network 147
6.5.3 The office of the mayor 149
6.6 Conclusion 150

7 ACTORS AND ACTANTS AND THE REALITY OF WATER SERVICES GOVERNANCE IN THE CITY OF JOHANNESBURG 152
7.1 The City – its size and actants in the oversight function 153
7.1.1 A hollow state 153
7.1.2 Parties involved in overseeing water services. 154
7.2 The Executive Management Team (EMT) 155
7.2.1 The City Manager 155
7.2.2 Guiding legislation 156
7.2.3 Performance management – fact or fallacy 157
7.2.4 The City Manager's actor-network 158
7.3 Group functions 160
7.3.1 Group Strategy, Policy Coordination, and Relations (GSPCR) 160
7.3.2 Group Governance 162
7.3.3 Group Risk and Audit 164
7.4 Line Departments and policy regulation of JW 164
7.4.1 The Environment and Infrastructure Services Department (EISD) 165
7.4.2 The Executive Director 166
7.5 Director of Water Resources 168
7.5.1 Deputy Director and the regulation of JW 168
7.6 Governance practices of officials 171
7.6.1 Formulating service delivery agreements 171
7.6.2 Assessing reports 172
7.6.3 Site visits to projects sites 173
7.6.4 Defining services levels 173
7.6.5 Networking and forging relationships 174
7.6.6 Collecting reports from JW 176
7.6.7 Policy development 177
7.6.8 Sending reports to other parts of the network 178
7.6.9 The Business planning process 180
7.6.10 Ensuring compliance with bylaws 181
7.7 Exerting influence and challenges 182
7.7.1 The Joint Operations Committee (JOC) 183
7.7.2 Capacity and a high vacancy rate 184
7.7.3 Reconciling politics and technical 185
7.7.4 Demotivated staff and performance decline 186
7.7.5 Dysfunctional performance management system 187
7.7.6 Power dynamics in the Actor-network 188
7.8 Conclusion 190
8 AN ACTOR-NETWORK THEORY READING WATER GOVERNANCE IN THE CITY 193
8.1 An actor-network reading of the governance structure 194
8.1.1 Triangulation 194
8.1.2 Main actants and their intermediaries 195
8.1.3 The City and JW as an actor-network 196
8.2 A compendium of documents governing JW 197
8.2.1 The Municipal Structures Act of 1998 198
8.2.2 Municipal Systems Act of 2000. 198
8.2.3 Municipal Finance Management Act 198
8.2.4 Water Services Act of 1997 199
8.3 Key notions of ANT and how they informed the study 200
8.3.1 Documents and artefacts as actors 200
8.3.2 Generalised symmetry 200

8.3.3 Enrolment 201
8.3.4 Translation 202
8.4 How the actor-network enables or hinders equity objectives 202
8.4.1 Who is responsible? 202
8.4.2 Intermediaries weakly inscribed 203
8.4.3 National Actors 203
8.5 New Public Management 204
8.5.1 Multiple control fuelling fuzziness and complexity 204
8.5.2 NPM has permeated the local state 205
8.5.3 JW – an exhibition of NPM led reforms 205
8.5.4 JW – Separate entity but not independent 206
8.5.5 City-JW – relationship opaque, hollow, dysfunctional performance monitoring 206
8.5.6 The dilemmas of equity and policy targets 207
8.6 City policies, equity objectives and weak inscriptions 207
8.6.1 The Growth and Development Strategy (GDS) 208
8.6.2 The Integrated Development Plan (IDP) 209
8.6.3 The Service Delivery Agreement - SDA 211
8.7 Regulation and monitoring of JW 212
8.7.1 Regulatory elements 212
8.7.2 Assessment Report – the main tool used by officials in the Water Services Unit 213
8.7.3 Nobody's head rolls if performance is poor 214
8.7.4 The role of WSR&PD in implementing the City's water policies 215
8.8 Conclusion 215
9 CONCLUSION 218
9.1 Restating the research questions and propositions 218
9.1.1 Research questions 218
9.1.2 Propositions 219
9.2 Key findings 219
9.3 Research approaches 221
9.3.1 Actor-Network Theory and the hallowed state 221
9.3.2 New Public Management and the governance paradoxes 222
9.3.3 Institutional ethnography and the missing state 225
9.4 Concluding note 226

Table of Figures

Figure 1: The Mayor and his team 18
Figure 2: The Administrative structure of the City since 2011 19
Figure 3: Dimensions of the research 28
Figure 4: The snowball exercise utilised to access the City 75
Figure 5: Research phases 82
Figure 6: List of National Treasury circular documents to municipalities 97
Figure 7: Structure of the City of Johannesburg in the 2000s 105
Figure 8: Contractual agreements: 2001-2006 107
Figure 9: The SDA between the City and JW 111
Figure 10: Broad City structure since 2011 119
Figure 11: Executive management of JW 127
Figure 12: A skeletal view of the City's governance structure 139
Figure 13: Distribution of Councillors by political party 140
Figure 14: The three main parties overseeing and monitoring JW 154
Figure 15: Part of the scorecard for the Executive Director of EISD 158
Figure 16: The Mandate of EISD in relation to water services in the City 165
Figure 17: Part of an assessment report submitted to ED for EISD 170
Figure 18: Extract from the EISD Business Plan 180
Figure 19: Main actants and the respective intermediaries 195
Figure 20: Service standards 210
Figure 21: City's scorecard on specific programmes in the IDP 211
Figure 22: Elements of water services regulation 213
Figure 23: Part of assessment report submitted to ED for EISD 214

Table of Tables

Table 1: Potentially valuable contributions of the ANT approach 40
Table 2: Addressing Cresswell's criticisms of applying ANT to the case study 41
Table 3: Assumptions informed by ANT thinking 42
Table 4: Specific implications of NPM principles 50
Table 5: Dissecting the field 78
Table 6: Interviewee count by stakeholder 81
Table 7: City Departments and units 83
Table 8: City documents analysed 87
Table 9: The mandate and composition of the Sustainable Services Committee 121
Table 10: The mandate of sub-mayoral committees 121
Table 11: Types of reports and reporting frequency 179

List of Abbreviations

ANC	African National Congress
ANT	Actor-Network Theory
CALS	Centre of Applied Legal Studies
CoJ	City of Johannesburg
CMU	Contracts Management Unit
DA	Democratic Alliance
DWAF	Department of Water Affairs and Forestry
GCRO	Gauteng City-Region Observatory
GDS	Growth and Development Strategy
GEAR	Growth Employment and Redistribution
GG	Group Governance
GJMC	Greater Johannesburg Metropolitan Council
GSPCR	Group Strategy Policy Coordination and Relations
GRAS	Group Risk and Audit Services
EISD	Environment and Infrastructure Services Department
EMT	Executive Management Committee
GPG	Gauteng Provincial government
IDP	Integrated Development Plan
ISD	Infrastructure and Services Department
JOC	Joint Operations Committee
JW	Johannesburg Water
MFMA	Municipal Finance Management Act
MMC	Member of Mayoral Committee
MoE	Municipal Owned Entity
MuSSA	Municipal Services Self-Assessment
NPM	New Public Management
PDG	Palmer Development Group
MFMA	Municipal Finance Management Act
MSA	Municipal Systems Act
NWSRS	National Water Regulation Strategy
OECD	Organisation of Economic Cooperation and development
PPWM	Prepaid Water Meters
RSA	Republic of South Africa
SACN	South African Cities Network
SALGA	South African Local Government Association
SDA	Service Delivery Agreement
SHU	Shareholder Unit
UAC	Utilities Agencies and Corporations
UN	United Nations
WR&B	Water Resources and Biodiversity
WSA	Water Service Authority
WSP	Water Services Provider
WSR&PD	Water Services Regulation and Policy Development

Abstract

This thesis examines the structure of the City of Johannesburg, its evolution and relationship with its water services provider, Johannesburg Water. The objective is to provide a detailed exposé of the complexity of urban water services management. The delivery of water services in the City of Johannesburg has been highly contested, but not fully understood. This thesis makes an important contribution to the understanding of this topic. It explores the evolution of the City's structure since 2000, its current configuration, and how various actors exert influence on Johannesburg Water in order to achieve efficiency and equity in the delivery of water services. The thesis applies the Actor-Network Theory (ANT) to understand how New Public Management (NPM) as a set of ideas for restructuring public services has materialised in the City of Johannesburg. ANT rejects the dualism between human and non-human entities and ascribes agency to both. Hence, the thesis draws together the influence of both officials and artefacts into a single network giving a comprehensive picture of water services governance in the City of Johannesburg. The City of Johannesburg turns out to be a prime example of how NPM influenced the structure and processes of water services governance in the City. The literature on NPM is vast, but there is a dearth of systematic empirical tests on how NPM-led reforms have configured municipal administrations and processes, particularly in the global south. This thesis has shown how state administrations have, in quest for efficiency, been hallowed out, processes complicated such that objectives of service delivery are not met fully. Document analysis, participant observation, semi-structured interviews, and ethnographic methodologies were utilised in the data collection. The quest for efficiency in the City in terms of politically determined objectives caused a persistent evolution in the City's structure since 2000 to the hallowed state that exists today. Fragmentation, multiple controls, and duplication of effort are now common features. The system of reporting has faltered and there are ambiguities as to who oversees the performance of Johannesburg Water due to the overly complex structure that has emerged due to NPM led reforms in the City of Johannesburg. NPM has introduced irreversible distortions in the governance of public services that continue to marginalise the poor. ANT has been a useful tool for revealing these complexities and locate where

the fault lines exist the bar municipal government from achieving objectives of service delivery, in particular reaching out to the poor. With the poor always present in society and the impossibility of reversing the effects of NPM, the thesis calls for a rethink of the role of the state in service delivery by positioning the poor for the sake of equity and social justice.

CHAPTER 1 INTRODUCTION

This thesis explores the ways in which Johannesburg Water (JW), a municipal-owned entity is regulated by the City of Johannesburg, South Africa. The key aspects of regulation include oversight and monitoring of water services. In 2001, the City of Johannesburg Metropolitan Municipality (the City, from now on) adopted a unique model of delivering water services known as corporatisation. This model involved creating a separate entity to specifically deliver water services on behalf of the City, boost municipal technical and financial capacity, and reduce service access backlogs (Smith, 2006; Smith and Morris, 2008). The City of Johannesburg was among the earliest municipalities in South Africa to utilise alternative service delivery models and was the first to introduce a corporatisation model of water service delivery as opposed to outright privatisation. This move resulted from administrative and service delivery challenges that the City was facing during the latter part of the 1990s. The challenges included a rising population, an increase in the demand for services, huge backlogs in delivery, ageing infrastructure, a fragmented administrative system with diffused lines of accountability, and capacity constraints (CoJ, 2000; Allan et al., 2001). The formation of corporate entities like Johannesburg Water (JW) was the City's solution to improving service delivery efficiency, extending services to needy communities, and raising much-needed revenue (Seedat, 2001; Smith, 2006). Therefore, corporatisation meant bringing private sector-type practices into public service management and specifically, the delivery of water services (Schmidt, 2008). It is quite representative of a global wave of administrative reforms known as New Public Management (NPM), where private sector-type practices are regarded as more "efficient" than public ones. Yet in post-apartheid Johannesburg, the adoption of this model does not necessarily mean that the City gives up any form of public mandate such as delivering water to all, in a very unequal urban context.

However, by adopting this model, the City confronted a set of governance challenges. Firstly, JW was established as a water and sanitation utility company in terms of the Companies Act 61 of 1973 and had its own board of directors and a certain degree of administrative autonomy from the City (Seedat, 2001). Secondly, the City was the sole shareholder and entitled not just to a shareholder dividend, but also had the potential to

interfere with the company's affairs thus compromising the autonomy intended for JW in the first place. Thirdly, although JW was established as a private company, its primary purpose was to deliver water services on behalf of the City according to the City's constitutional mandate for delivering services equitably. The equity objective meant extending services to previously disadvantaged community located main in the townships. The City, therefore, needed an effective regulatory mechanism to ensure proper corporate governance in line with the Companies Act 71 of 2008, financial sustainability of the company and equitable distribution of water services across the city and in particular, extended access to previously disadvantaged communities in townships and informal settlements (Tomlinson, 2003). In 2001, the City put in place a regulatory and monitoring mechanism for overseeing the operations and affairs of JW as a City entity. However, over the years, the number of oversight structures expanded to involve numerous parties so that the point of authority has become unclear, hence the question: Who governs Johannesburg Water?

1.1 Context

This thesis was undertaken within the context of local government transformation in South Africa. In 1994, the South African government took bold steps to dismantle the racial policy of apartheid that had created racially divided communities, and service delivery was discriminatory. The election of a democratic government in 1994 and the adoption of a non-racial constitution in 1996 paved the way for the de-racialisation of local government, and several local administrations were merged to form the single-city municipal governments that are seen in South Africa today. At the time, Johannesburg comprised thirteen independent local municipalities that were later reduced to five, forming the then Greater Johannesburg Metropolitan Council (Allan et al., 2001; Smith, 2006). The national government moved swiftly to enact legislation to address service delivery issues. In the water services sector, the South African government published the White Paper on Water Supply and Sanitation, highlighting equity of access as the fundamental issue to be addressed in the sector (DWAF, 1994).

Although the need to extend water services to previously disadvantaged communities was urgent, the newly formed municipalities lacked sufficient human and financial capacity to address the challenge. Within this context, the City of Johannesburg opted for the corporatisation model of service delivery in the water sector and Johannesburg Water Pvt Limited was created alongside Pikitup Pvt Limited for waste removal, and City Power Pvt Limited for electricity. The literature on water services governance in Johannesburg focused mainly on service delivery and human rights issues related to access. This thesis analyses the practical aspects of the corporatisation model in the City of Johannesburg and how it has achieved its service delivery goals of efficiency and equity in the context of New Public Management. These entities and several others were created in the early 2000s as part of the City's restructuring process under the iGoli 2002 Plan (Allan et al., 2001). The iGoli 2002 Plan was a strategic plan devised by the then Greater Johannesburg Metropolitan Council (GJMC) as a vehicle for driving the transformation of the City of Johannesburg in the new democratic dispensation. The City Manager motivated for the adoption of the iGoli 2002 Plan in February 1999, citing the financial and organisational problems the City was facing at the time (CoJ, 2000). IGoli 2002 was premised on a mandate of developmental local government and was therefore suited to fulfil the Constitutional objective of providing democratic and accountable government for local communities (CoJ, 2001).

On the 16th of March 2017, the newly elected Democratic Alliance mayor of the City of Johannesburg, Cllr Herman Mashaba, announced that the City intended to reintegrate the municipal-owned entities back into the City structures. The entities targeted for reintegration were Pikitup, City Power, Johannesburg Roads Agency, Johannesburg Fresh Produce Market, and Johannesburg Water. The new mayor was convinced that these entities had to be under the direct administration of the City. He claimed that the entities were relatively autonomous and that the City would not be able to accelerate service delivery. According to the mayor, the governance model of the entities had disempowered the City because they were more inclined to listen to their boards of directors than the City. In his speech, Cllr Mashaba said:

> Coordinating entities towards the achievement of the City's single strategic vision is unmanageable. The current arrangement thus presents substantial challenges that we must address to fast-track service delivery. The decision to reintegrate entities is a proven best practice. The trend countrywide among metro municipalities has been to bring these entities within City structures (CoJ, 2017: p.9)[1]

He was particularly critical of the fact that the municipal entities operated under the Companies Act and hence were semi-autonomous, yet the City was the sole shareholder. The mediation of the boards of directors hindered the City from effectively responding to service delivery demands from the public which slowed down progress. In an interview on national television[2], Mayor Mashaba lamented the City's lack of complete control over the entities while being ultimately accountable to residents:

> These boards of directors of the entities are not adding any value to the system. In fact, these boards are a stumbling block to ensuring that the residents of our City get responsive, fast track service delivery in our City (SABC 2).

By integrating the entities into the City's core administration, the mayor hoped to remove decision-making bottlenecks, ensure efficient service delivery, and save the City 18 million rands in fees paid to the non-executive boards of directors in the entities (CoJ, 2017). The questions that arise here are what the governance landscapes look like, who the actors are, and what their agency, norms, and practices are. Who, in reality, governs Johannesburg Water? Can the mayor's claims that the model disempowered the City be substantiated? There is a history to the formation of these utilities. The City initially designed them to operate on commercial principles and have clear levels of accountability and transparency. The Council is the sole shareholder for each of these enterprises and acts as both owner and regulator. The enterprises, also known as Utilities, Agencies and Corporations (UACs), were expected to operate independently with each having its own board of directors to oversee the management and operations of the company (COJ, 2000). However, it is in the interests of the City to ensure that these entities operate

[1] Speech extract by Executive Mayor of Johannesburg Cllr Herman Mashaba Johannesburg AGM - Setting the City's Top 9 Priorities. 16 March 2017.

[2] SABC Morning Live Show, Joburg Mayor Mashaba on the reintegration of municipal entities back to the City https://www.youtube.com/watch?v=gcXYpY4r6V0

efficiently to generate sufficient revenue for the City. The City's financial model is modelled around the JW and City Power because the two entities generate the bulk of the City's revenue. Revenue from these entities is used to subsidise other sectors that which generate little or no revenue.

1.2 Introducing the case study

The City of Johannesburg is one of eight metropolitan municipalities in South Africa. As an administration, the City came into existence after the local government elections in December 2000. Its administration is extensive and the City has an average of 30 000 employees (CoJ, 2018).

1.2.1 The legislature and executive

The City's governance structure comprises a Council and an executive committee. The legislature is the political arm of the City, consisting of elected councillors and others chosen on the proportional representation principle. The elected Council has a five-year tenure of office, after which a new Council is elected. The executive comprises the mayor, members of the mayoral committee (MMCs), the City Manager, and executive directors of line departments. Figure 1 below shows the structure of the executive of the City in 2015.

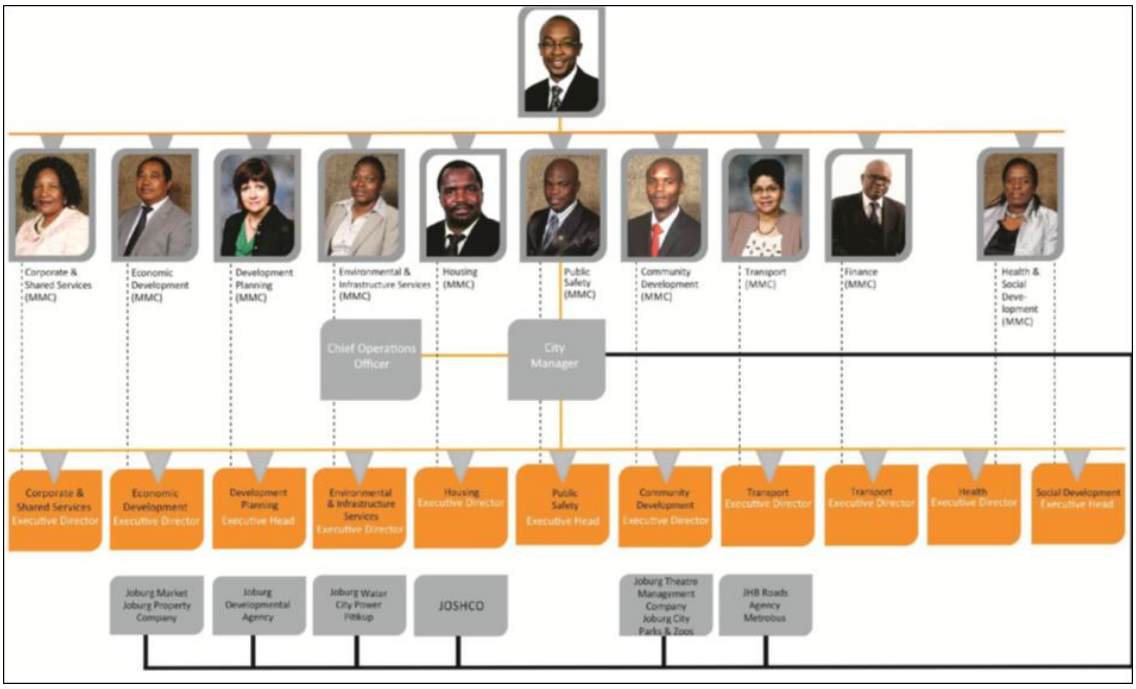


Figure 1: The Mayor and his team
Source: CoJ, (2011)

1.2.2 Water services sector

In terms of water services, the City delivers water through a private entity, JW. The City, through the Environment and Infrastructure Services Department (EISD), is responsible for formulating policy (the 'what' of water services), while JW focuses on the implementation (the 'how' of water services). EISD comprises five units, and I conducted my research in the one responsible for water services, known as the Water Management and Biodiversity unit. This unit has four sub-units, and I was based in the Water Services Regulation and Policy Development sub-unit responsible for regulating JW in terms of water services. However, as the research revealed, the regulation of JW as a City entity involves numerous parties spread across the City's structure and beyond. Figure 2 below shows the structure as described.

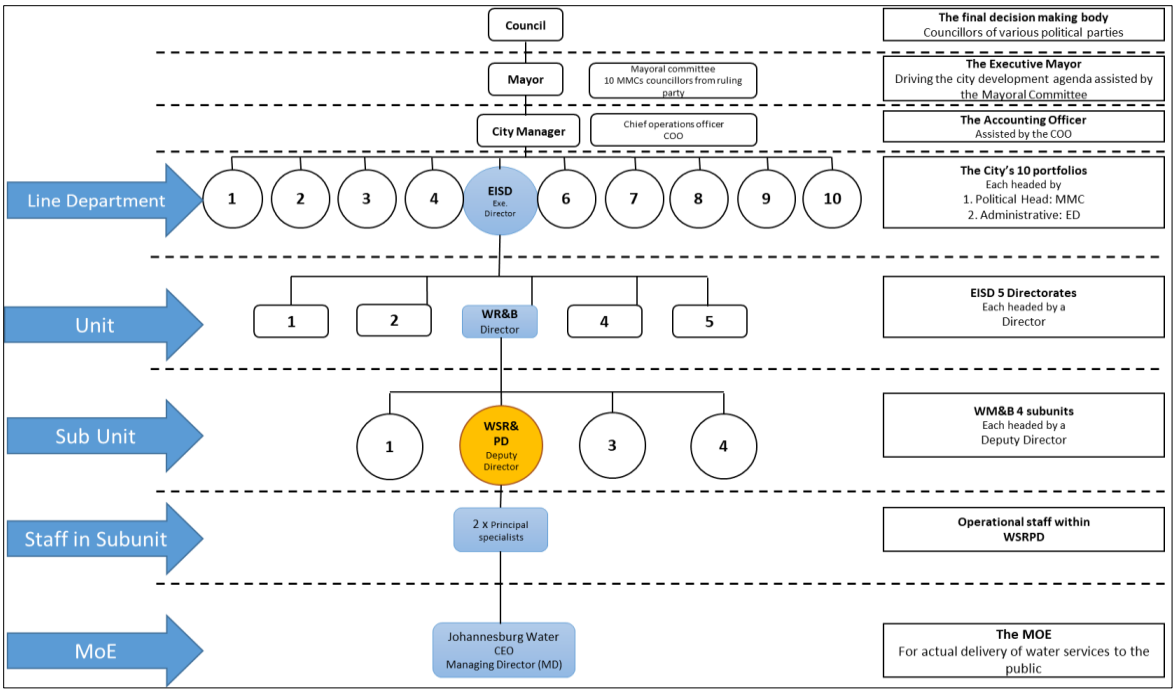


Figure 2: The Administrative structure of the City since 2011
Source: Author

JW comprises a board of directors that reports to the City through the Council, a chief executive officer and a managing director. The managing director services as the main link between the entity and the City and reports on service delivery issues through the executive management team. Johannesburg Water is required by law to report quarterly to the City on progress made towards meeting City objectives on services delivery.

1.2.3 The objectives of the water sector

In delivering water services to residents in the city of Johannesburg, the City has had two main objectives. The first was that the City wanted to establish a water utility that would operate efficiently in order to raise sufficient revenue for the administration. The second was that services needed to be extended to cover poorer and previously disadvantaged areas of the city, that is, a social justice objective (Smith, 2006; Smith and Hanson, 2003). However, both objectives have not been universally shared within the City. For example, the political leadership, in particular, the Mayor and the councillors, have been more inclined towards the social justice objectives, while the senior executives such as the City Manager and the Managing Directors of the entities have been incentivised to prioritise

financial and other objectives such as environmental sustainability. As this research has shown, these seemingly conflicting priorities have resulted in officials adopting a set of norms and practices to satisfy the demands of their principals and of the public.

1.3 Research puzzle and motivation

Following all these episodes, I found myself with a double puzzle that I needed to solve, which I framed as follows:

> A: How is the governance of the water services policy in the City of Johannesburg determined?
>
> B: Where does the agency to regulate and monitor Johannesburg Water effectively and ensure services are appropriately delivered lie?

The dominant water governance narrative in the City of Johannesburg treats the City as a unified entity, emphasising the human right of access to water and making an assumption that the constitutional and legal framework adequately to enables municipalities to deliver on their mandates. For example, the work of Bond and Dugard (2008), von Schnitzler, 2008, and Matlala and Benit-Gbaffou (2015) focus on service delivery movements' responses to the City's policies and the failure of the policies to accommodate the poor adequately. A holistic analysis of the governance framework for water services in the City and the norms and practices of City officials remain a grey area and largely understudied. Instead, state officials are often stereotypically portrayed as lazy, incompetent and corrupt, while the underlying bureaucratic structures, processes and governance paradigms that engender such practices receive inadequate attention (Hoag and Hull, 2017; Hoag, 2011). Analysts and researchers have accused New Public Management (NPM) of the shortcomings and ills in service delivery, but there is a lack of systematic empirical tests on how NPM impacts the delivery of public services (Lapuente and Van de Walle, 2020).

1.3.1 Research questions

Based on the foregoing, I formulated my central research questions as follows:

What is the City of Johannesburg's policy guiding its delivery of water services and how it is implemented through regulating and monitoring its delivery entity, JW?

1.3.2 The sub research questions include

- Who defines water strategy and how in the CoJ?
- How do the key actants exercise the oversight function of Johannesburg Water in relation to the City's water policy?
- To what extent is CoJ able to exert oversight over JW as its operating arm, given the fact JW pursues efficiency objectives (including cost-recovery) which might be in tension with equity objectives?

1.4 The main argument of the thesis

The main argument of this thesis is that the corporatisation model for water service delivery in Johannesburg has given rise to a governance landscape in which the real locus of authority is uncertain. There is no definitive answer as to who is in charge of water governance in Johannesburg because:

- There is a multiplicity of both human and non-human actors regulating, monitoring, and overseeing the affairs of JW and setting direction in terms of water delviery.
- Officials' practices in governing water services constantly evolve as new actors emerge and others become superfluous
- The agency of the different actors to influence JW varies significantly across time and space.

In the context of New Public Management (NPM), this thesis deploys Actor-Network Theory (ANT) to identify the different actors governing JW and to assess the nature of the agency that these actors exert on JW. The ANT approach focuses attention to non-human actants such as documents, policy instruments, score cards, legislation and mandates, their use in practice and how they influence officials' practices. While the water governance landscape of water services in the City is initially blurred and fuzzy, applying

the ANT technique reveals a set of governance norms and practices that have enabled the City to render waters services effectively to the residents of Johannesburg over the last twenty years.

1.5 Water services governance in the City of Johannesburg

Jiménez et al. (2020) propose a practical definition of water governance that depicts the functions ('what'), the attributes ('how'), and the outcomes ('what for') of water governance. The authors argue that water governance is "a combination of functions, performed with specific attributes, to achieve one or more desired outcomes, all shaped by the values and aspirations of individuals and organisations" (*ibid*. p.3). Water governance consists of multiple functions and processes, including policymaking, coordination, planning, financing, management arrangements, monitoring and evaluation, regulation, and capacity development (Jiménez et al., 2020). These functions are interlinked and have no distinct boundaries (*ibid*). Performing the functions under corporatised arrangements and within a highly complex model of local government is a complicated and challenging task for officials. The main difficulty lies in the fact that water is a fundamental resource, and its provision is inclined towards natural monopoly conditions (Nauges and van den Berg, 2007). A natural monopoly is a market situation that allows one company or firm to operate more efficiently than two more companies (Greer, 2012). Where a natural monopoly occurs, the need for regulation and giving direction arises (Nauges and van den Berg, 2007).

1.5.1 Regulation

Regulation is one of the core functions of governance. It is defined as a sustained and focused attempt to alter or control the behaviour of others according to defined standards or purposes to produce broadly identified outcomes (Jiménez et al., 2020; Freiberg 2006; Black, 2002). Regulation is a way of controlling service providers and making them accountable for providing services while protecting service users from unreasonably high tariffs and/or under-delivery (Mbuvi, 2012). A regulatory function covers "formal legal mechanisms, enforcement processes and other rules to ensure that interests of stakeholders are respected and that standards, obligations and performance are

maintained, as well as to ensure that the interests of each stakeholder are respected" (Jiménez et al., 2020:7). A municipality, an organ of state, or a private organisation can perform regulation as a governance function. NPM reforms advocate the use of performance contracts in order to lock individuals into achieving organisational objectives.

1.5.2 Water Services in the South African context

The Constitution of the Republic of South Africa, published in 1996, is a major document that set the tone of what the essence of water services delivery should be in South Africa in general. The central theme in the constitution is equality; an ideal that is expected and enforced and one that all municipalities strive for in their planning processes. A critical area was services delivery since services to the public had previously been delivered in an unequal manner. The Constitution, by defining access to services as a fundamental human through a Bill of Rights, obliges municipalities to progressively realise this right within their means. In addition, Section 152 of the Constitution defines service delivery by local government as ensuring the provision of such services to communities in a sustainable manner. According to the Constitution, managing the delivery of water services and ensuring access to communities is a function of local government. Local municipalities such as the City of Johannesburg are in terms of the Water Services Act of 1997 designated as water service authorities (WSA) and have a constitutional obligation to progressively realise efficient, affordable, economic and sustainable access to water supply and sanitation services to citizens within their jurisdictions. The City took cognisance of this constitutional obligation in its restructuring process and in the formation of the water service delivery utility, JW. JW became the City Water Services Provider (WSP) responsible for the actual delivery of water services. However, the responsibility of providing these services remained with the City. The City design the water policy and JW is expected to implement.

The City states in its documents that it 'needs to transform our city into a non-racial, equitable and just society' (CoJ, 2011, p. 20) and that it wants to achieve 'universal and equitable access to safe and affordable drinking water for all' (JW, 2016, p.37). An interviewee, a prominent lawyer in Johannesburg, stated that one of the critical factors

that informs everything that local authorities do is their obligations that flow from the Constitution and from legislation designed to give effect to the Constitution. These obligations demand that institutions which provide public services be responsive and efficient, and it was in this spirit that the City of Johannesburg embarked on a major restructuring process in terms of the iGoli 2002 Plan.

Other legislation such as the Water Services Act 108 of 1997 and strategic policy documents like the National Water Regulation Strategy (NWSRS), set the legislative and policy framework for regulating WSA institutions. According to Section 19 of the Water Services Act, municipalities can choose to provide water services either internally through a line department or externally through a corporatised water utility. Where the latter situation prevails, the local municipality plays a local regulation role to ensure that the entity complies with the water services regulations and standards and meets service delivery targets. The municipality must have sufficient institutional mechanisms for holding the water utility to account. In opting to form JW as a water utility, the City of Johannesburg had some challenges. According to Smith (2006), the City's identity as the sole shareholder, regulator and client, engendered a referee-player problem. However, the main challenge for the City of Johannesburg was reconciling the equity imperative with efficiency and the commercial objectives which guide the operations of JW (Smith, 2006; Harvey, 2007). The opportunity for fulfilling social and efficiency goals simultaneously was compromised.

1.6 Analysis framework in brief

The thesis uses the Actor-Network Theory to analyse how New Public Management as an ideology has restructured the City administration and its influence on officials' practices.

1.6.1 Actor-Network Theory

Actor-Network Theory (ANT) is an approach for understanding complex socio-technical processes in concert, emphasising relationships and agency of both human and non-human actors (Bilodeau and Potvin, 2016; Desai et al. 2017). Grounded in the work of

Bruno Latour, Michel Callon and John Law in the mid-1980s, ANT was initially developed as a way of making sense of knowledge production in the natural sciences (Latour, 1987; Best and Walters, 2003; Desai et al. 2017; Braga and Suazez, 2018). The basic premise of ANT is that objects, entities, or phenomena result from the assemblies, associations, connections, and interactions of diverse elements known as heterogeneous actors (Law, 1992; Latour, 2012; Braga and Suazez, 2018; Zawawi, 2018). The relationships or interactions between these actors are an expression of their agency. ANT postulates that, to achieve a particular objective, both humans and non-humans must be enrolled as actors through a process of translation to form a socio-technical network (Hassard et al., 1999; McLean and Hassard, 2004; Ahmedshareef et al., 2014; Zawawi, 2018). Additionally, non-human actors are accorded equal status and similar agency as human actors through what is described in ANT terms as symmetry (Bilodeau and Potvin, 2016; Desai et al. 2017; Braga and Suazez, 2018). This thesis uses the ANT approach to arrive at an explanation of water service governance by way of descriptions (Müller, 2015).

1.6.2 New Public Management

The thesis uses the JW corporatisation model to analyse how NPM ideas have influenced the governance of public services at the local level. The formation of Johannesburg Water as a private entity was primarily intended to harness private sector efficiency practices and to create a financially sustainable enterprise for delivering water services in Johannesburg. The White Paper on Local Government of 1998 was the primary instrument for introducing NPM into the public service in South Africa. However, through the iGoli Plan, the City embraced the formation of corporatised entities to deliver services. At the national level, the Growth, Employment, and Redistribution policy (GEAR) of 1996 marked a significant turn in the government towards a neoliberal path characterised by a withdrawal of the state (Narsiah, 2002).

The separation of provision and production through agencification was typical of NPM reforms (Lapuente and Van de Walle, 2020). These reforms were meant to replace the traditional, hierarchical and legalistic Weberian type of public administration (Lapuente and Van de Walle, 2020). Private sector managerial practices were introduced into the

management of public services because it was assumed that these practices would enhance both the efficiency and effectiveness of public organisations (Hood, 1990). While NPM has many facets, this thesis looks specifically at agencification, which in the City has led to the formation of utilities, corporations, and agencies. The process has resulted in a split between policy formulation and the implementation of services. In countries where NPM reforms have been implemented, numerous autonomous or semi-autonomous organisations have been created (Van Thiel, 2004). NPM is a managerialist paradigm that responds to three dimensions of water governance, namely functions (what?), attributes (how?) and outcomes (what for?)

The City of Johannesburg is no exception as it created 15 UACs through the iGoli 2002 Plan. Here, the executive decides the 'what' of service delivery, while 'how' is in the hands of autonomous entities whose managers have incentives to deliver services most efficiently. A major criticism of NPM is that balancing autonomy and political control is problematic (Christensen and Lægreid, 2007). However, only a few studies have been conducted on how this plays out in practice, and certainly, none exist for Johannesburg Water. This study seeks to fill the gap by analysing actors, their agency, norms, and practices in the corporatised water sector of the City of Johannesburg.

1.6.3 Real governance

This thesis also applies Olivier de Sardan's concept of real governance. By directing attention to the inner workings of state bureaucracies, the concept of real governance helps to avoid the political science biases of describing African bureaucracies as clientelistic, neo-patrimonial, and culturalist without predetermining what these terms constitute (Olivier de Sardan, 2008). The objective of this thesis is not to show whether the City bureaucracy is clientelistic or neo-patrimonial, but to explain how water governance is enacted and what the influence of NPM has been. This desire to

understand the inner workings of the state warranted the ethnographic approach used in the research.

1.7 Research dimensions

This thesis was greatly influenced by the work of Akhil Gupta (2012) in India and Matthew Hull (2012) in Pakistan. These research studies demonstrate how the production of government statistics (in the case of India) and state official documents (in Pakistan) are instrumental in shaping not just bureaucratic conduct but also state-society interactions and policy outcomes. Gupta later made a vitally important conclusion, which characterises the bureaucracy more dramatically. He says:

> Bureaucratic order is built on classifying, recording, filing, and retrieving information, following predictable rules and patterns for doing so, and reaching decisions that are justified by processes and norms of decision-making, including the conditions in which a decision can be revisited, challenged, or reversed (Gupta, 2013: p.436).

Gupta's focus on state officials and statistics and Hull's concern with documents, provided a framework for this research. For example, Gupta demonstrated that the state is fragmentary, individuals that make up the state play a vital role regardless of where they are positioned, and the state always projects a false image to the public. On the other hand, Hull found that state documents and their circulation in the bureaucracy were critical in determining the governance of public services. These viewpoints have also inspired research on the daily functioning of African bureaucracies in West Africa published in separate volumes by Bierschenk and Olivier de Sardan, (2014) and Muñoz, (2018). The studies present several cases of how bureaucracies are configured, and explore the everyday life of public officials in governing public services. This thesis studies the impact of NPM restructuring of a city administration on officials' practices. It uses the Actor Network Theory as a heuristic tool for making sense of the governance landscape under study. The dimensions of the research are shown in Figure 3 below.

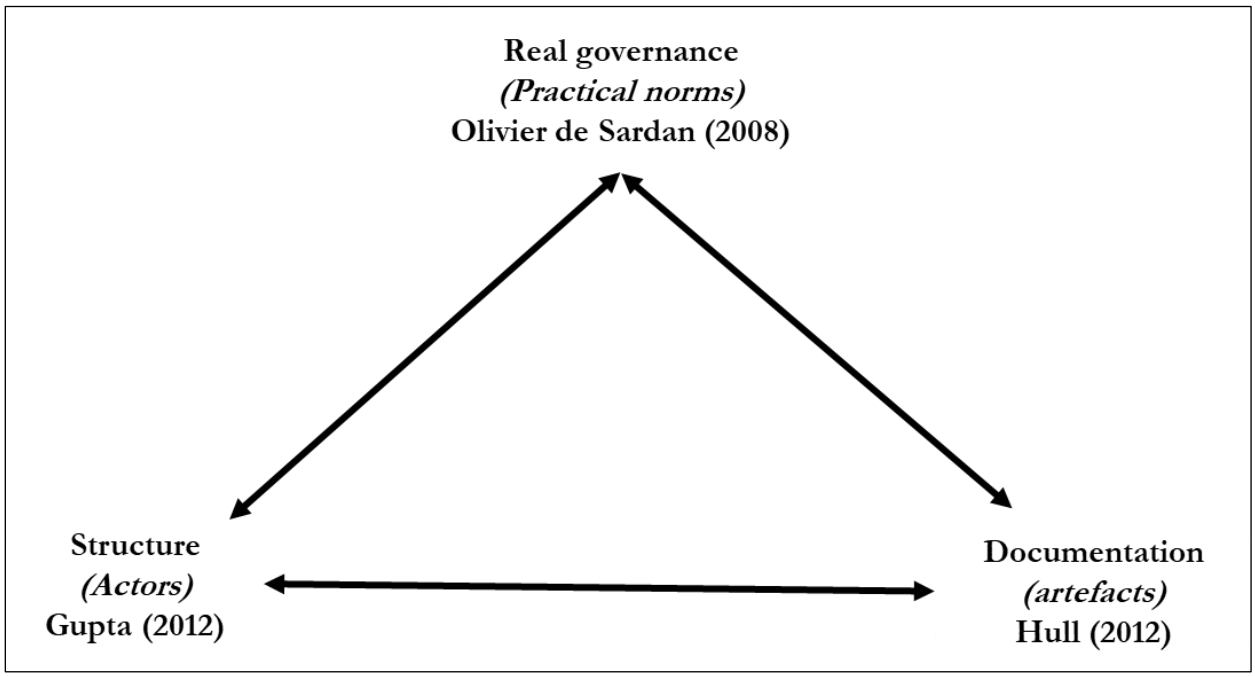


Figure 3: Dimensions of the research

Based on this framework, this thesis makes the following propositions.

- *Proposition 1*:
  The quest for a suitable corporate structure since the early 2000s has led to a hallowed out and fragmentary City bureaucracy.
- *Proposition 2:*
  A fragmented bureaucracy coupled with loosely inscribed policies and plans have left the City without a clear governing capacity for water governance in Johannesburg.
- *Proposition 3*:
  The nature of water services governance in the City and the pursuance of efficiency in delivery have stifled the equity objective.

1.8 A note on the methodology and structure of thesis

1.8.1 Research design

The overarching research design was qualitative with an interpretive epistemology (see Chapter 5). In order to produce a detailed account of water services governance in the

City, I used ethnography. According to Reeves et al. (2013), ethnography allows the researcher to provide rich and holistic insights into people's lives, culture and behaviours, and the nature of the location they inhabit. Consequently, I spent a total of eighteen months in the City of Johannesburg to gain an insider perspective of the City's governance structure, the governance instruments, and the practices they engender.

Ethnographic explorations are capable of sorting through the contradictions and complexities found in modern bureaucracies and of exposing the various codes of conduct (official and unofficial), and discretions that officials adopt to stabilise the seemingly chaotic environment in which they work (Lipsky, 1980; Hoag, 2010; Bierschenk and Olivier de Sardan, 2019). Documentary analysis and semi-structured interviews with officials, ex-officials, academics, and experts in the water sector were also deployed to extract rich data on water services governance in the City of Johannesburg presented in this report.

1.8.2 The organisation of the thesis

This thesis consists of ten chapters. After this introductory chapter, three chapters describe the building blocks upon which the thesis rests. Chapter 2 introduces the Actor-Network Theory; a heuristic tool used to identify the actors involved in water governance and how they are connected to form an 'actor-network. Chapter 3 discusses the way municipal restructuring under New Public Management principles have been analysed in governance literature focusing on local government sector reforms in South Africa in general and the water sector in particular. Chapter 4 discusses the methodology, research strategy, data collections and analysis methods deployed in the study. Chapter 5 prefaces the research findings by tracing the institutional changes in the City since 2000. Chapter 6 analyses the City's governance landscape as it existed during the time of the study. Chapter 7 describes in detail and analyses the various actors and actants involved in water services governance. Chapter 8 reflects on the Actor-Network Theory reading of NPM effects on the City of Johannesburg's administration, Lastly, Chapter 9 gives a summary and conclusion.

2 ACTOR-NETWORK THEORY

One of the aims of this thesis is to identify the various actors involved in water governance in Johannesburg. A useful tool for achieving this task was Actor-Network Theory (ANT). This chapter introduces the approach and discusses its merits in understanding the water governance landscape in the City of Johannesburg. This landscape at the City level is generally fuzzy and fragmented because the City is located at the local level where implementation happens. The local level tends to be complex due to unique realities and multiple conflicting values associated with this sphere of government (Gupta, 2010; Jaglin, 2014). To deal with these challenges, government and public institutions create large and complex bureaucracies, which they constantly modify and reshape to achieve service delivery (Ackoff, 1979).

These complex bureaucracies comprise multiple actors located both within and outside, and these need to be mapped to gain a better understanding of the governance landscape, how it functions, and where absolute authority lies. However, the local state is so ephemeral and muddled that attempts to understand it are difficult and often yield different answers (Latour, 2005). For this reason, the thesis deploys ANT, a unique and innovative research technique capable of simplifying complicated, messy, and ephemeral realities (Latour, 2005). ANT has the potential to unveil how the reality we live in is performed by a multiplicity of actors through a variety of practices (Mol, 1999; Bilodeau and Potvin, 2016). The chapter proceeds by describing ANT, its basic tenets, methodology, and merits.

2.1 Actor-Network Theory

ANT has, in recent years, gained currency in planning studies due to its ability to analytically reveal complex situations (Rydin, 2012). The main anchoring point of ANT is the proposition that no entity exists in isolation and that all phenomena are the effects or products of heterogeneous networks comprising both human and non-human elements (Law, 1992; McLean and Hassard, 2004; Zawawi, 2018). ANT thus claims that complex situations can be understood by tracing how essential parts of a network interact to form a stable system (Latour, 2005). The equal treatment of actors is a major facet and unique

principle of ANT that allows for mapping the associations that exist between them. ANT is well suited in governance studies given this flat ontology, its orientation towards empirical case studies, and its use of ethnomethodology (Latour, 1999; Müller, 2015; O'brien, 2015; Braga and Suazez, 2018).

2.1.1 What is Actor-Network Theory?

ANT is a conceptual tool for understanding complex socio-technical processes in concert, emphasising relationships plus the agency of both human and non-human actors (Roy, 2015; Bilodeau and Potvin, 2016; Desai et al., 2017). ANT thus deviates sharply from traditional hierarchies and subject dichotomies considered necessary in scientific thinking such as society/nature, human/non-human, agency/structure, content/context, macro/micro and local/global (Braga and Suazez, 2018; Zawawi, 2018). In this vein, Latour (1996) argues that social structures are incapable of framing durable interactions or constructing social realities without a combination of human and non-human entities. The association of human and non-human entities creates new hybrid entities called socio-technical networks or actor networks (Bilodeau and Potvin, 2016; Braga and Suazez, 2018). For example, a man (subject) with a weapon (object) is not the subject with an object but a new hybrid called the 'man-weapon' entity (Latour, 2005). Therefore, ANT conceptualises objects not as mere tools or background stages upon which human and social actors perform their roles but as active agents producing effects in silence (Bilodeau and Potvin, 2016; Braga and Suazez, 2018). As a result, ANT can facilitate understanding of complex or muddled social situations (McLean and Hassard, 2004; Bilodeau and Potvin, 2016; Miles, 2017; Zawawi, 2018).

ANT does not attribute a theoretical or explanatory framework *a priori*. Instead, it emphasises that a detailed description of the actors and the relationships they form must be undertaken in a way that allows a situation to explain itself (Miles, 2017; Braga and Suazez, 2018). ANT posits that by articulating the relationships and entanglements, which together form a unified and stable actor-network, an explanation of reality can be obtained (McLean and Hassard, 2004; Miles, 2017; Braga and Suazez, 2018). Within the ANT framework, both human and non-human actors acquire identity, and express meaning

and materiality to act only from within the actor-network and never outside it (Mol, 1999; Latour, 2005 cited in Bilodeau and Potvin, 2016; Braga and Suazez, 2018).

Applying an ANT approach, therefore, means engaging in descriptions to arrive at explanations (Müller, 2015). ANT asks questions relating to how the world is made and remade through associations between actors. The primary task of the researcher is to trace these associations (Latour, 2005). By tracing the associations between actors, either forged or severed, ANT acknowledges that action is not a fait accompli but rather a precarious accomplishment. An ANT analysis thus does not start from a finished actor-network but is interested in their gradual genesis and accomplishment (Latour, 2005; Müller, 2015). Additionally, ANT takes cognisance that actors, the networks in which they participate, and the ideas they advocate are continually transformed and negotiated until a stable network is achieved (Zawawi, 2018).

2.1.2 The terminology of ANT

ANT uses particular terminology, described in Box 1 below:

Box 1: The Terminology of ANT

Actor or actant: An actor is any object, subject, or entity that can associate and perform an action or modify a situation (Callon, 1991 cited in Zawawi, 2018; Braga and Suazez, 2018

Generalised symmetry: Symmetry is the foundational proposition in ANT, which essentially rejects the dualism between human and non-human entities (Bilodeau and Potvin, 2016).

Translation: Translation is an essential aspect of ANT that describes the process of enrolling heterogeneous actors or actants into an actor-network until the once divergent interests are aligned (Callon, 1986; Müller, 2015; Zawawi, 2018).

Intermediary: Within ANT, the interaction between actors is facilitated by an intermediary, which can be a text inscribed, text calculated on paper, or an electronic medium (Callon, 1991; Ahmedshareef et al., 2014).

Actor-Network: An actor-network is a heterogeneous collection of aligned interests, including for example, policymakers, users and computer systems (Hedström, 2010).

Inscription: An inscription is a mechanism embedded in a programme, which is an embodiment of translated interests and is designed to inform how actors act (Hanseth and Monteiro, 1997; Ahmedshareef et al., 2014). Inscriptions can be either strong or weak. Weakly inscribed policy means responsibilities are not clearly stated and assigned to individuals.

Alignment: Alignment is the degree of agreement between actors and the commitment to their roles in the network (Callon, 1991). A weakly aligned network is one in which an actor's commitment is not guaranteed, e.g. due to competing priorities (Ahmedshareef et al., 2014). *Black box:* A black box is an element or a network that embodies several elements concealed to the outside world (Ahmedshareef et al., 2014).

Source: compiled by author

2.1.3 The methodology of ANT

Although it carries the word 'theory', ANT is not a theory. Instead, it is a range of research methods based on tracing connections linking humans and non-humans through objects, technologies, policies or ideas (Latour, 2005; Bilodeau and Potvin, 2016; Desai et al., 2017). ANT differs from a theory in that it does not make general and substantive claims about objects of investigation. According to ANT, a theoretical statement is incapable of determining the extent to which non-humans act or the nature of their agency because the role of non-humans is purely an empirical question (Ahmedshareef et al., 2014; Miles, 2017). Hence, ANT seeks to describe how connections are formed, what holds them together, how they are extended, and what they produce (Feldman and Rentan, 2008; Desai et al., 2017). In this way, a situation is allowed to explain itself (Latour, 2005; Fenwick, 2011). The context of a research object is examined more carefully in a non-linear fashion and not merely as an input-output model (Ahmedshareef et al., 2014). ANT is consequently a suitable methodology for explaining how a wide range of heterogeneous entities are linked together to produce social change (Bryson et al., 2009).

An ANT analysis proceeds by tracing associations between actors and their actions to capture the chain of events that occurs in complex systems (Latour, 2005; O'brien, 2015; Müller, 2015; Bilodeau and Potvin, 2016). Research methods are invented and adapted during fieldwork rather than fixing them before fieldwork (Biershank and Olivier de Sardan, 2019). In other words, research methods under ANT are flexible and adapted to suit the current situation.

2.2 The concept of translation in ANT

An important concept specific to ANT is that of translation. Translation describes the process by which various actors or actants are enrolled into a network, and how their divergent interests are aligned (Callon, 1986 Müller, 2015; Zawawi, 2018). Translation is required to bring about a stabilised network. It is therefore indispensable for action to occur (Callon, 1986*;* Fenwick, 2011). Translation connects disparate entities such as humans, things, ideas, interests, values, expert and lay knowledge, financial resources and institutions, and reveals not just the most visible orderings but also the more 'elusive and messier' elements that may otherwise remain unnoticed (Latour, 1999; Fenwick, 2011; Ahmedshareef et al., 2014; Bilodeau and Potvin, 2016). The translation process begins with the main actor establishing a network to achieve a particular goal. This main actor goes on to mobilise and enrol other actors to form a network. The various divergent interests of these multiple actors are aligned through negotiation and coordination (Callon 1986; Latour, 2005; Ahmedshareef et al., 2014). Intermediaries are used to assign identities and roles to the actors through coded inscriptions (Callon, 1991; Zawawi, 2018). If successfully performed, translation can govern at a distance (Latour, 1987; Müller, 2015; Braga and Suazez, 2018).

2.2.1 Factors affecting translation

There is no guarantee that once the translation is set in motion, as shown above, a stable and sustainable actor-network will be formed. There are several intervening factors that either enable or hinder the translation process. Two major factors are critical for a successful translation, namely inscriptions and intermediaries (Hassard et al, 1999; Zawawi, 2018). Inscriptions are devices or artefacts used as convincing mechanisms for enrolling actors in the actor-network (Best and Walters, 2013). These inscriptions contain ideas and practices that are considered so commonsensical as to be turned into rarely-questioned black boxes or facts (Gendron, et al, 2007; Ahmedshareef et al., 2014; Zawawi, 2018). Inscriptions can take the form of documents, devices, graphs, computer programmes, texts, discussions, presentations, or technical objects essential for securing alliances needed to support a particular objective (Zawawi, 2018). The various

inscriptions either define roles or describe the relationships between entities or actors within a network (Callon, 1991; Latour, 1999; Zawawi, 2018).

Inscriptions thus constitute mechanisms through which actors seek to translate the messiness of a project into usable and acceptable knowledge claims that are capable of being disseminated (Callon et al., 1986; Latour, 2005; Bilodeau and Potvin, 2016). Inscriptions are mobile and stable and can be combined to eliminate divergent views (Latour, 1987; Emsley, 2008; Zawawi, 2018). In the presence of inscriptions, humans do not need to be physically present to enable action to occur. However, inscriptions need to be strong and definitive. Weak inscriptions leave room for interpretation, objections and unclear roles for actors that may result in delayed action or no action at all (Bilodeau and Potvin, 2016; Zawawi, 2018).

Intermediaries facilitate interaction between actors by transport, meaning that they can be used to enrol other actors without themselves being transformed (Latour, 2012; Allen, 2011; Bilodeau and Potvin, 2016). This includes inscribed text, calculation on paper or an electronic medium (Callon, 1991; Ahmedshareef et al., 2014). However, intermediaries may transform, distort, or modify the meaning of the elements they carry before passing them on, hence adding uncertainty to the progress of a project (Latour, 2005; Bilodeau and Potvin, 2016). For example, data carries information about the physical world, which gives context and provides a basis for reasoning and action (Boisot and Canals, 2004). Data acquire meaning through context and convention and modifies expectations causing the agent to react in unique ways (ibid). Intermediaries facilitate translation by fostering consensus and convincing actors to be enrolled.

2.2.2 Advantages of using ANT

ANT has several advantages as an investigative tool. First, ANT helps to deal with complexity by reassembling a wide range of entities whether material (e.g. technical devices and resources) or social, such as organisations and making sense of interventions (Bilodeau et al., 2011; Bilodeau and Potvin, 2016). Second, by proposing a socio-technical view of interventions, ANT illuminates the process by which social actors

and technical entities are linked, and accounts for essential network actants that are often ignored in conventional theories (Bilodeau and Potvin, 2016). Third, ANT offers the ability to assess whether the net of all the interactions among these entities supports the achievement of the object of the project or programme, especially where the arrangements consist of partnerships and intersectional linkages (Bilodeau et al., 2011; Ahmedshareef et al., 2014). Fourth, ANT provides a holistic view by allowing the researcher to capture data across an entire process of a project, and by following the actors, ANT can reveal how inclusive, participative and democratic a process is (Bryson et al. 2009; Bilodeau and Potvin, 2016). Lastly, ANT can be applied as a heuristic tool to concrete situations where both technical entities and social actors can be credited with being the source of actions (Bilodeau and Potvin, 2016). In strategic planning studies, it has been shown that ANT is the only methodology that allows artefacts produced during strategic planning to be taken as essential mediators and actors. These artefacts include SWOT[3] analyses, maps, draft plans and adopted plans (Bryson et al. 2009). ANT exposes in detail the extent to which strategies are emergent, growing out of prior associations, and deliberate, resulting from new associations (Mintzberg, 1994; Bryson et al., 2009).

In order to gain a fuller explanation, ANT is capable of being used in conjunction with other research methods such as grounded theory (Bilodeau and Potvin, 2016). Documenting how policy intervention effects are produced is usually a challenge, but ANT offers a solution by providing an appropriate analytical framework for capturing actions and reconstructing the various connections through which intervention influences change (Bilodeau and Potvin, 2016). ANT recommends ethnographic methods, longitudinal data, and observational notes taken during events such as meetings, planning days, team building sessions, logbooks and interviews. It also supports the analysis of government documents such as strategic plans, progress reports and intervention tools, local and international media, websites and ephemera such as letters, emails, contracts, meeting agendas and reports (Bilodeau and Potvin, 2016; Zawawi, 2018). According to ANT, all these objects influence human action (Callon, 1986; Latour, 1987 cited in Bilodeau and Potvin, 2016).

[3] SWOT – stands for the analysis of *S*trengths, *W*eaknesses, *O*pportunities and *T*hreats

2.2.3 Value of ANT in governance

Many urban planning projects and programmes are characterised by ambitious, complex and often conflicting goals. Examples are the Urban Riverfront Renewal Projects in Denver, Phoenix/Tempe, and San Jose (Wessells, 2007) and an Eco-building in central London (Rydin, 2012). The former project revealed that rivers were actants responding to action on them, and hence became subjects of discussions in planning meetings. In the latter, location and the presence of other taller buildings in the vicinity were an issue in constructing this eco-building. In both cases, dozens of actors were involved, including planning documents. Planning documents played a critical role by enrolling other actants, enabling associations and fostering common understandings of the problem. These examples also showed that human actors might have different understandings and intentions for a project, yet can associate with each other and work out collaborative practice through the translation roles of non-human actants or mediators (Rydin, 2012). Plans, in particular, were a way of rendering possibilities, initiating conversations, communicating objectives, striking deals, lining up funding and costing specific proposals (*ibid*). An ANT approach facilitates the examination of subtle and complex elements inherent in planning projects such as the ones described here.

In an analysis of healthcare quality, Desai et al. (2017) used ANT to show how patient-experience data has agency that affects the healthcare quality of patients. They asked how data becomes embedded in the web of relations and reshapes everyday interactions among healthcare staff responsible for collecting, analysing, and operationalising the data and the technologies used to collect and visualise the data. They found that sets of data are not inert objects wholly open to human manipulation, but full actors endowed with vital properties and linked to other parts of the organisation in which they circulate. They have equal agency as all those taking part in the processes and can either improve or hamper healthcare quality. While it is true that people use data to do things, it is equally valid that data makes people do things by influencing their work, structuring organisational practices, and influencing decision-making. They also showed that technical devices for collecting data, protocols that regulate the work of healthcare practitioners, the chains of

authority they are accountable to, and the targets they need to meet, all form part of the actor-network. Hence, all actors or actants are endowed with the potential to produce change and be changed by others. Desai et al. have also shown that data is not inert, and tracing its performativity through an organisation reveals essential insights about the organisation's structure. As data travels and is translated into reports, narratives and interventions, it reveals alternative (or informal) organisational relations to those officially recognised. They conclude that a flattened perspective offered by ANT, which treats actors as equals regardless of their assumed place in the institution, gives a more accurate account of how quality improvements emerge in practice. Attention is focused on alternative organisational structures and attributing equal agency to both human and non-human actors.

In water governance, ANT turns our attention to the complex interactions between human and non-human entities. It helps analysts to avoid biased assessments of the sector by not assuming that actors hold power by themselves but do so in relation to other actors in a network of influence between human and non-human elements (Latour, 1987; Gooch, 2007; Ahmedshareef et al., 2014; Bilodeau and Potvin, 2016). Aspects such as the capacities of human entities, for example, scientific evidence, expert knowledge, financial resources and regulations, can be traced using a system of following the actors, adopting a chronological ordering of events, making practical decisions during fieldwork, and using a broad range of data sources (Latour, 2005; Bilodeau and Potvin, 2016). For example, Roy (2015) used ANT to analyse water services in Delhi, and this allowed him to include residents, Delhi Jal Board officials, bottled water vendors, hand pumps, illegal tapping, and packaged water into a single narrative. The supply of clean water is a function of municipal authorities who achieve it through a network of pipelines. To understand this network, Roy (2015) used ANT to bring material entities such as standpipes and water treatment plants into an analysis of societal water governance institutions. Hence, ANT provided a lens for viewing the role of technology in shaping social processes, which gave a more holistic appreciation of complex technological systems.

2.2.4 Responding to critiques of ANT

Criticisms have been levelled against ANT encompassing ontology, epistemology and methodology. Ontologically, ANT has been notorious for proposing that both humans and non-humans have equal agency (Braga and Suazez, 2018). The conception of a flat ontology where non-human objects are assumed to have agency has been a subject of contention within the social sciences with objects being viewed by some as having no intention of their own. However, this conception has provided a useful starting point for producing a proper interpretation of the complexity of the associations formed between humans and non-humans. ANT furnishes us with tools to better attend to the minute displacements, translations and practices regardless of what the actors involved look like. This work which might otherwise have been neglected is essential to understand the inner workings of our collectives (Cresswell et al., 2010). ANT is not a theory offering explanations of social phenomena, but an approach for describing the world grounded in empirical case studies (Muller, 2015).

ANT is also valuable for framing research questions, guiding data collection and theorising potential explanations (Reeves et al., 2008). According to Cresswell (2010), qualitative research is generally more suited to theory development than hypothesis testing. Since ANT is mainly qualitative, it can shift the analytical focus towards sense-making and extracting actor perspectives (*ibid*).

A common criticism levelled at ANT is that it is descriptive and does not intend to build a theory. However, according to Latour (2012), good descriptions are more helpful in explaining social relations than explanations from previous theoretical frameworks. This view is supported by Collins and Stockton (2018), who argue that detailed and thick descriptions are the cornerstone of qualitative research. However, they warn that in a highly contextualized case, the details may devolve into a story that is difficult to transfer to other settings if there is no robust framework. ANT provides this framework, and its use helps to theorise how networks emerge, trace associations that exist, how they evolve how actors are enrolled into a network, and how a network achieves stability albeit temporary (Cresswell et al. 2010).

Lastly, from a methodological perspective, ANT is criticised for assuming an agnostic or detached researcher position. However, when ethnographic methods are used in data collection, positionality plays a vital role in eliciting and constructing knowledge (McLean and Hassard, 2004; Cresswell et al., 2010). Therefore, it is recommended that researchers be explicit about their involvement and show awareness of how accounts are produced and how choices are made (McLean and Hassard, 2004).

2.3 Applying ANT

Despite these criticisms, ANT provides a unique perspective for analysing relationships between humans and non-humans, about their interactions and trajectories (Braga and Suarez, 2017). ANT also offers an opportunity to think of relationships in a more complex way, including the incentives and barriers found in networks (Latour, 2005). Through the concept of infralanguage, Latour (2012) helps us give voice to the actors and the vocabulary they use to avoid the risk of silencing them through the pre-elaborations of the researcher. The researcher is forced to focus on the social reality investigated, on the actors' actions and the richness of the descriptions, without using divisions, judgments or contradictions based on previous and intermediate concepts (Cresswell, 2010). By allowing the non-human to contribute to understanding the human, one gets a holistic view of reality.

2.3.1 Modifying ANT to suit case study

Following Cresswell et al. (2010), ANT was modified to suit the case shown in Table 1 below.

Table 1: Potentially valuable contributions of the ANT approach

Key notion	**The valuable contribution of this notion**	**Implication for my study**	**What study would look like if not informed by ANT**
Translations	Detailed insight into the complexity of different forces at play when artefacts are introduced in a new context - this can also help to inform sampling considerations.	Insight into how documents, data and officials interact in the City water sector. Show how weakly inscribed policy may lead to inaction rather than action.	Would ignore how documents are drafted and take them to be black boxes.
The active role of objects	How objects can actively transform established practices by influencing the way human actors are associated.	Data and policy documents are actively viewed as transforming the way water services are regulated.	Documents may be viewed as passive, which may lead to underestimating their influence

Analytical method and theory development	As a conceptual tool to guide the research process, frame the research questions, collect and interpret data and theorise potential explanations.	The notion of networks can help to conceptualise connections and the active role of documents and data and theorise potential outcomes.	Sampling may neglect potentially important actors, which may result in a limited and a-theoretical approach.
Generalised symmetry	Can help investigators to resist imposing a priori differences between actors.	It helps to recognise that objects can create unpredictable outputs and have agency.	Prior assumptions of dualism between humans and objects may distort the analysis.
Enrolment	It can help to explore how different parties/actors are enrolled to become part of a network and how relationships are formed over time.	It helps to map out the interests of different parties and how the most powerful (e.g. managers) try to enrol officials.	May not be able to capture the different effects and stages of change in detail.
Process flow and changing nature of reality	A tool for exploring how complex relationships between actors and effects come about through movements in the network (e.g. power relationships and social effects).	It helps to conceptualise how change is a process, and context-dependent.	A rigid view of reality may be too simplistic and mask the complexity of change.

Source: Adapted from Cresswell et al. 2010, p.9.

2.3.2 Countering the criticism of ANT

Following a similar approach to Creswell et al. (2010), I developed a modified ANT approach to address the methodological issues peculiar to the City of Johannesburg, as shown in Table 2 below:

Table 2: Addressing Cresswell's criticisms of applying ANT to the case study

Methodological issues (Cresswell et al., 2010)	**How this may be addressed (Cresswell et al., 2010)**	**Implications for the study – Water services governance in the City of Johannesburg**
ANT does not a priori divide the world into micro and macro contexts or attribute agency to either individuals or social structures.	Broader contextual factors should be taken into account and may be viewed as other parts of the network.	This means looking at the entire water sector from national through to local government and the various political and socio-economic rationale shaping water governance at the local level. ANT reminds us that many actors are locked into networks, specific elements of which reside outside of the focal organisation (Alcadipani and Hassard, 2010). I conceptualised the City not as a unified whole but a tangled temporary knot comprising multiple elements (Latour, 2005).
The number of actors in the network is potentially infinite.	Researchers need to make rigorous and pragmatic decisions of where (and from whom) to start and where to stop data collection. The primary focus should be on answering the research question.	Although the focus was on exploring official practice within the water units, views from other units, officials, and stakeholders within the City administrations were sought, e.g. the City Manager's office, Mayor's office, Group Governance, and GSPCR.
Different actors can play multiple roles in multiple	It may be useful to view networks as consisting of	I examined how different networks (units) were aligned and how they changed with

networks at multiple time points.	several sub-networks which change over time.	successive changes in the City administration structure.
ANT is too descriptive and fails to come up with any definitive explanations or approaches of how exactly actors should be viewed and analysed,	Necessary not to lose sight of the broader study aims as purist ANT can be prone to get lost in detail.	The focus of the study was on examining official practice in regulating water services in the City, focusing on ethnographic accounts, interviews, and analysis of documents.
A truly detached observer does not exist as he/she always comes from a particular position in time and space and plays an active role in eliciting and constructing accounts.	Researchers need to be pragmatic and acknowledge their involvement through reflexive accounts.	I kept a field journal and regularly wrote reflexive notes during the fieldwork. ANT allows for a variety of data collection methods which caused me to focus on the social reality of the research object, actions of the actors, the richness of the descriptions, and to avoid presumptions (Braga and Suazez, 2018; Sayes, 2014; Fenwick, 2011).
Human accounts, and often those of the most powerful privileged - offer little insight into the material world.	We need to recognise individual differences between humans and acknowledge that artefacts have attributes and history.	Focus on individual interviews about their work and how they experience their roles in the governance of water. Show how stabilisation of social meaning is achieved through inscription, translation and enrolment (Callon, 1986b; Latour, 1987; Walters, 2002; Best, 2012).

Source: Adapted from Cresswell et al. 2010, p.9.

Based on the foregoing analysis by Cresswell, four assumptions emerged which are informed by an ANT perspective. These assumptions relate to both the City in general and the water sector in particular as shown in Table 3 below.

Table 3: Assumptions informed by ANT thinking

About the City….	**About the water sector…**
1. The City is not a unified whole but is complex and fragmented, not discoverable for the outside.	1. Thinking of the sector as consisting of human and non-human associations whose everyday interactions must trace observations of how sites and actors mediate between each other (Wessells, 2007).
2. Managers confront these complexities and attempt to navigate them in a bid to serve the public.	2. The sector has a specific goal. ANT on goal-oriented actor-networks.
3. The environment of a practice is characterised by "complexity, uncertainty, instability, are unique, and value-laden" (Ahmedshareef et al., 2014).	3. The net of all interactions supports (or does not) the achievement of the project (Ahmedshareef et al., 2014).
4. An explanatory model developed by tracing associations using textual data from reports and other City documents, identifying actor networks and examining actor-network dynamics, i.e. alignment, coordination, constraining and empowering influences (Callon, 2012).	4. Where an actor-network is very large and so complicated as to treat some elements as black boxes, and simply check inputs and outputs (Ahmedshareef et al., 2014), ANT is a tool for opening up black boxes.

Source: Compiled by Author

2.4 Conclusion

This chapter introduced and discussed Actor-Network Theory as a tool for analysing complex problems in planning environments at the local level. It was argued that since the City of Johannesburg operates at the local level, it confronts a complex and fuzzy environment with unique realities and conflicting values. Such environments pose challenges for public officials and researchers alike, to the extent that unique methodologies such as ANT are needed. ANT proved to be a tool for understanding this complex environment by emphasising the relationships and agency of both human and non-human actors. The focus was no longer only on administrators, legislators, elected executives, and policy intellectuals, but on how they do their work and what that work involves in terms of norms and practices. An essential element of ANT is translation, which is a four-stage process for building an actor-network to achieve particular societal goals.

3 NEW PUBLIC MANAGEMENT AND WATER SECTOR REFORM IN SOUTH AFRICA

At the dawn of democracy in 1994, a new governance model was undoubtedly needed to reach out to previously marginalised groups (Dexter, 1995; Fraser-Moleketi, 2006). An overhaul of the public sector followed the transition to democracy in South Africa through a myriad of policies and legislation that immensely affected local government as much as other spheres of government. Rethinking local government to align with the new political, social, and economic priorities was profoundly challenging. For example, there was minimal consensus among various stakeholders on the vision for local government (Beall et al., 2002). Debates on envisioning the setup of the new local government centred on resource constraints, the nature of the local governance system to be introduced, and the relative weight to be accorded to the issue of equity versus efficiency-type priorities (*ibid*). Constitutionally, local government was mandated to deliver services and build a democratic, just, and equitable society (RSA, 1996). This meant that responsive and efficient institutions for providing public services were needed. South African policymakers, like those worldwide, were attracted to NPM by its promises of economic efficiency, transparency and accountability (Furlong and Bakker, 2010). This chapter examines the origins of NPM, its basic tenets, and how these shaped public sector reform, particularly planning, organising staffing, coordinating, reporting, and budgeting processes at the local government level.

New Public Management (NPM), is a governance paradigm that emerged in the early 1980s. The defining features of NPM a reorganisation of government with aim of making it more efficient. Hence, NPM meant the introduction of results-oriented and performance-related operating principles that increase accountability and responsiveness (Hood, 1991; Chipkin and Lipietz, 2012). In discussing NPM, I make four claims: (i) NPM has inherent tensions, (ii) these tensions are more pronounced in the global south in general, as exemplified in South Africa's water sector, (iii) certain practical norms have emerged as officials attempt to navigate these tensions, and (iv) these practical norms have influenced, in unique ways, the delivery of water services in the City of Johannesburg. Aspects (iii) and (iv) are not dealt with in this chapter per se but are discussed in the

empirical chapters. This chapter also shows that institution-building at the local government level in South Africa in line with the ideological stance that the national government took in 1996 through the Growth Employment and Redistribution (GEAR) policy, was primarily influenced by the ideas of NPM (Chipkin and Lipietz, 2012).

3.1 What is New Public Management?

The literature on NPM offers no single definition of NPM but offers several perspectives (Ferlie et al., 1996; Barzelay, 2001). This section discusses three perspectives of NPM that have emerged in the academic treatment of the subject. The first is that NPM refers to a wave of public sector reforms in specific countries during a particular period. Second, NPM is viewed as a scholarly discourse or label that scholars have used to describe organisational changes occurring in different countries at a particular time. The third perspective is that NPM is an approach to public administration or a style of public sector management. These perspectives are described in more detail below.

In the late 1970s and early 80s, a wave of public sector reforms occurred mainly in the developed world. These reforms were dominant in Organisation for Economic Cooperation and Development (OECD) countries and comprised a mix of values whose meaning was not commonly shared among bureaucrats (Hood, 1991; Kettl, 1995). However, these reforms aimed to make the governments more efficient by reducing public bureaucracy and modernising the public sector by adopting private sector-type management practices (Hood, 1991; Ferlie, 2017). These ideas and philosophies were highly mobile and rapidly spread from source countries such as the United Kingdom, New Zealand, Australia, the Scandinavian and North American countries, to many countries in the developing world (Kettl 1997; Barzelay 2001; Ferlie, 2017). NPM was a term coined to identify and describe the public sector reforms occurring in these countries (Ferlie, 2017).

Another view is that NPM is a term conveniently coined by scholars and professionals to refer to distinctive themes, styles, and patterns of public service management observed in certain developed countries during the 1980s (Hood, 1991; Barzelay, 2001). The

cumulative effect of policy decisions in these countries caused a substantial shift in the governance and management of the public sector (Osborne and Gaebler, 1993; Barzerly, 2001). Scholars coined the term New Public Management to capture what they saw as governmental endeavours to improve the public sector. Public services were restructured, and various strategies such as deregulation and decentralisation, the creation of autonomous agencies, output-based evaluation, contracting, and quasi-markets were introduced (Robinson and LeGrand, 1993; Hood, 1994). Academics in the United Kingdom and Australia, in particular, coined the term to describe the approaches that these countries adopted during the 1980s as part of their efforts to improve the public sector (Pollitt 1990; Hood 1991; Denhardt and Denhardt, 2000).

The other perspective is that NPM was a loose term for categorising a broad set of administrative ideas and reforms that affected the public sector (Hood, 1991; Bevir, 2003). While there is consistency about certain aspects, authors such as Ferlie et al. (1996) argue that NPM is like an empty canvas on which one can paint whatever one likes, implying that the term NPM is open to interpretation by governments (Hood, 1991; Kettl, 1995; Ferlie et al., 1996; Stark, 2002). Consequently, NPM has emerged as a broad set of managerial values, a body of doctrinal beliefs, and an administrative philosophy (Hood, 1991; Barzelay, 2001; World Bank, 2004). Theoretically, NPM is expected to foster a management culture for running public service organisations as if they were private entities to improve efficiency and responsiveness to political principals while keeping public sector objectives in mind (Hood, 1991; Kettl, 1997; World Bank, 2004).

Despite the varying perspectives, the primary motive of NPM reforms was to improve the efficiency of the public sector. The main feature of these reforms was reducing the size of the public sector bureaucracy and adopting private-sector practices, including performance management. NPM is thus a paradigm for modernising and re-engineering the public sector, reducing the state's role, and adopting incentive-based managerial practices (Kalimullah, 2012; Heywood, 2013). Grounded in rational and public choice

theories[4], NPM seeks to offer a more efficient mechanism for delivering public services and enhancing governmental performance (Kelly, 1998). Ultimately, NPM proposes to reorganise government and public service institutions to improve public services to citizens.

3.1.1 The rise of NPM

NPM was a government response to the inefficiencies that were experienced in public bureaucracies. For example, during the 1970s, several western economies suffered stagflation[5], and the public lost confidence in the state bureaucracy (OECD, 1995; Barzelay, 2001). A greater need for change in public sector management arose such that by the 1980s, public management became an active area of policy-making in countries like New Zealand, Australia, Sweden and the U.S. (Hood, 1991; Kettl, 1995; Barzelay, 2001). Governments in these countries perceived the traditional bureaucratic paradigm of public administration as weak and monopolistic, and called for a market-oriented approach that opens the door to a broader range of service providers (O'Flynn 2005).

Osborne and Gaebler (1993) and Gruening (2001) argue that the very first practitioners of NPM were located in the United Kingdom (UK) under Prime Minister Margaret Thatcher and municipal governments in the United States (US) during Ronald Regan's presidency. The major driving force was the economic recession in these countries. Later, New Zealand, Australia and other OECD countries followed suit (*ibid*). The parliamentary democracies with robust and centralised executive powers in these countries had proved to be bureaucratic failures and the public pressured these governments to fulfil electoral commitments, improve economies, and contain public sector growth (Hood, 1991; Barzelay 2001). NPM reforms were consequently viewed as the panacea for correcting these failures which lay in public administration (Hood, 1991; Smith and Robison, 2008).

[4] Rational choice theory states that individuals make choices that will provide them with the highest benefit while Public Choice Theory involves the application of economic methods in solving political problems.

[5] Stagflation refers to an economy that is experiencing a simultaneous increase in inflation and stagnation of economic output. Stagflation was first recognised during the 1970s when many developed economies experienced rapid inflation and high unemployment because of an oil shock.

3.1.2 The theoretical basis of NPM

The basic proposition of NPM is that the adoption of private sector management practices and opening up of public services to competition (also referred to as marketisation) leads to efficiency in public sector service delivery (Hood, 1991). Market approaches are viewed as capable of dealing with government failure[6] and avoiding public officials' self-interested behaviour (Hefetz and Warner, 2004). This thinking rests on three main theoretical perspectives: Public Choice Theory, Principal-Agent Theory, and Management Theory (Boston et al. 1996). These perspectives apply economic ideas to political structures.

Public Choice Theory rests on neo-classical models of economic behaviour, such as competition (Ferlie, 2017). A public choice theory critique of government is that it is unresponsive, inefficient, monopolistic, and wasteful, hence cannot achieve public sector goals. The pursuits of power, status, income, ideology, and patronage are seen as causing allocative inefficiency, oversupply, and waste in public bureaucracies (Boyne 1998). Many features of NPM, such as competitive markets for public services, and private sector provision of public services governed by contracts, separation, and fragmentation, are policy prescriptions influenced by public choice theory (Boyne et al. 2003).

Principal-Agent Theory also postulates that public sector performance can be improved through incentive-based staff contracts. The theory rests on the assumption that officials adhere to the terms and conditions of the contracts they have with their principals (Guston, 1996). It provides a means of conceptualising both human behaviours in the agency relationship and developing organisational forms based on assumptions of self-interest, opportunism, incomplete information, and goal divergence (Althaus 1997). A contract is an important instrument that connects the principal and the agent, forces the government manager to articulate policy and expectations, defines performance standards and the monitoring of rules, and fixes a reward (De Laine 1997; O'Flynn 2005).

[6] Government failure is a situation where the government fails to do things it should do, or the government does things it ought to do. Government failure can also be viewed as a situation where state interventions exacerbate or fail to resolve market failure (Keech and Munger, 2015).

Managerialism in the public sector emphasises the adoption of private-sector practices focusing on efficiency, effectiveness and excellence (Deem, 1998). There is a perceived shift of responsibility and authority to managers that allows flexibility in staffing. It emphasises performance management based on the logic of results and managerial responsibility rather than just following instructions. Performance management, in particular, involves setting targets that officials are expected to meet and acting as a tool for managing at a distance. In sum, NPM proposes raising efficiency in service delivery by exposing the public sector to competition by shifting responsibility to public managers and introducing performance incentives to public managers through performance management.

3.1.3 The basic tenets of NPM

Based on the three main theoretical perspectives described in the preceding section, it is clear that NPM seeks to replace traditional public administration bureaucracies with lean, flat structured, autonomous organisations. However, NPM emerged as a descriptive mapping of ideas and practices observed in Anglo-Saxon and Antipodean countries. Hence there is no definitive list of principles that define NPM (Hood and Peters, 2004; Hibou, 2015). Over time, new themes have emerged, and some old ones either were modified or dropped altogether (Hood, 1991; Pollitt 1990; Hood and Peters, 2004). For this reason, NPM has been applied differently and in varying degrees in different parts of the world.

According to Hood (1991) there are three core aims of NPM reforms. Firstly, NPM reforms seek to make public service more business-like by introducing competition and incentives for improving individual and organisational performance (Dunleavy et al., 2005). Secondly, there is a greater emphasis on altering management practices of the public sector towards the private sector, fostering an entrepreneurial spirit, increasing flexibility, avoiding rigid procedures and practices, and focusing on results (Hood, 1991; Osborne and Gaebler, 1993; Kettl, 1995). Thirdly, to do things better, NPM emphasises decentralisation of control through various alternative service delivery mechanisms (Bakker, 2010; Herrera and Post, 2014). Table 4 below, drawn from Falconer (1997) and

other authors, specifies the implications of the NPM principle for public bureaucracies as outlined by Hood (1991).

Table 4: Specific implications of NPM principles

Public Managers	- Must be proactive managers and not reactive administrators. - Must have decision-making authority. - Must have discretion in decision-making. - Must be central to improved public sector performance. - Must be visible, responsible and accountable to the public (not faceless bureaucrats)
Performance Management	- Management is at the core of public-sector activity. - Public sector organisations are subjected to rigorous measures of performance. - Organisations pay closer attention to objectives. - Performance measurement ensures accountability. - The focus is more on results and not processes. - Efficiency - how much you achieve with available resources (budget, staff and time).
Incentives	- Reward structure for employees. - Performance-based remuneration and bonuses (Heywood, 2013). - Short term contracts (Heywood, 2013).
Disaggregation of units	- Decentralisation of public sector organisations (Cameron, 2009). - Disaggregation of bureaucratic units to achieve efficiency and accountability. - Government formulate policies, agencies implement them (Heywood, 2013). - Smaller units are better able to establish objectives quickly and directly. - NPM requires decentralisation - Rightsizing of units and reduction of duplication (Cameron, 2009). - No bureaucracy.
Market competition	- Market mechanisms efficient allocators of resources. - More competition in public service provision.
Business Principles	- Public sector service provision efficient.
Cost minimisation	- Emphasis on cutting cost (i.e. doing more with less).
Quality	- Improved levels and standards of service delivery. - Improved quality of service.
Service users	- Service users are transformed into customers with rights

Source: Author based on Falconer, 1997; Heywood, 2013, Cameroon, 2009

3.1.4 Paradoxes, limitations and criticisms of New Public Management

Although purported to make state bureaucracies efficient, several unanticipated side effects accompany the implementation of NPM reforms (Hood and Peters, 2004). These side effects come across as paradoxes, limitations and criticisms, which accompany well-intentioned reforms (*ibid*). There are four major paradoxes associated with NPM.

The first is the managerial paradox. A managerial paradox stems from shifting responsibility for public service to managers who are given full authority under NPM. This shift in responsibility depoliticises the management of public services hence insulating service delivery issues from any form of political interference (Herrera and Post, 2014). However, the central thrust of these reforms is to improve efficiency and responsiveness to political principals while keeping public sector objectives in mind (Hood, 1991; Kettl,

1997; Hood and Peters, 2004; World Bank, 2004). In the South African context, this paradox is not easily solvable in areas where services have been historically delivered in an unequal manner. On the one hand, politicians want social goals to be prioritised while public managers working on performance-based contracts emphasise the efficiency of the organisation. Hence, rather than being depoliticised, public management becomes even more politicised as politicians influence senior manager appointment processes to avoid loss of control of the implementation process (Maor, 1999; Herrera and Post, 2014).

When political issues are separated from administrative issues, the role of politicians is restricted to the setting of general policy goals (Smith, 2003; Larsen et al., 2005). In this way, managers obtain considerable freedom to interpret the rules and decide on delivering services (Marshall et al., 1999; Larsen et al., 2005). Thus, politicians, particularly local councillors, can be rendered more or less redundant which ultimately undermines the legitimacy of local government (Lasern et al., 2005). A significant criticism of NPM is that it shifts managerial accountability and public service delivery debates outside of the public realm, making the government less accountable to the public (Kettl, 1997).

A second paradox is the production paradox. This emerges from the explicit and intensive specification of work outputs, standards and measures of performance contained in the performance contracts of institutions and managers. There is a false assumption that all public services can be specified and measured, and assigned to specific individuals. In reality, this is not the case; when work packages are split into several tasks, management responsibilities become blurred, individual relationships are fragmented, and there is duplication of effort, which leads to loss of accountability (Gregory, 1995; Minogue, 2000). Hence it becomes difficult to locate where in the organisation responsibility rests.

A third paradox is known as the neo-Tocquevillian paradox, so-called because of the French experience after the 1789 revolution. The post-revolutionary government, rather than rid itself of the ancient Bourbon regime's administration, elevated it (Maor, 1999). This outcome was contrary to Osborne and Gaebler's prediction (1992) that public

management reforms replace rule-based, process-driven routines and increase emphasis on results. Under NPM, one observes that process controls over bureaucracies are retained and augmented, causing an increase in the regulation of public bureaucracies (Hood et al., 1999; Hood and Peters, 2004). Although the state was expected to play a minimal role, NPM produced unintended outcomes, and many domains of bureaucratic activity became more rule-based and process-driven than the traditional public administration bureaucracy that NPM was meant to displace (Pollitt, 1990; Hood and Peters, 2004).

Beatrice Hibou, in her 2015 book *The Bureaucratisation of the World in the Neoliberal Era,* describes how NPM reforms fuelled bureaucracy in the public sector. According to Hibou, NPM is simply a reincarnation of public administration to introduce the three Es of *e*fficiency, *e*ffectiveness and *e*conomy into public administration. She shows that NPM tries to abolish bureaucracy through a whole set of procedures, rules and principles that adhere to the market logic of competition and profit-making. However, the shift from a logic of means to a logic of results has caused an increase in procedures that focus on the performance assessment of both individuals and the organisation. Ultimately, under NPM, bureaucracies expand rather than shrink. Hibou identifies three ways in which bureaucracy occurs: (i) by setting up of bodies involved in reforms, (ii) through instruments put in place to guide the reform and (iii) the widespread use of techniques for controlling and assessing performance. Further, as efforts to de-institutionalise an institution face strong opposition, each administrative phase overlaps or sediments, and gradually become part of the evolving administration, creating further complications in the administration such as overlapping mandates and redundancy (Cooper et al., 1996).

The fourth paradox is known as the transaction costs paradox. The competitive market regimes that NPM advocates rely on a set of underlying assumptions that are difficult to meet in reality such as free entry or exit of players, a large number of sellers, perfect information, and perfect mobility of production factors to ensure the uniform cost of production and profit maximisation. This means that work contracts must be prepared in such a way as to cover all these aspects. The task is difficult and nearly impossible, and

the monitoring and enforcement of the contracts is onerous. Entrusting public managers with high levels of control over resources, especially where they have the additional burden of operating in a competitive environment is considered high risk as they often lack the requisite capacity and management knowledge (Christensen and Laegreid, 2004; UNDP, 2004,).

Based on these four paradoxes, there is strong criticism levelled against NPM in that it privileges efficiency and shifts the focus of government away from socially desirable goals such as equity, which matter both socially and politically (Smith, 2003; Harrison, 2006). The relegation of equity to the status of a secondary goal of governance may vitiate the successes of NPM and render it an undesirable model for countries committed to social justice, such as South Africa (Smith, 2003). Since NPM imagines government in business terms, practices used in the private sector are emphasised. According to Keuleers (2004), NPM is “client-focused, gives a priority role to management and emphasises empowerment, entrepreneurship, effectiveness and a dynamic organisational culture modelled on the private sector” (p.4). These principles do not augur well for the circumstances of developing countries due to widespread poverty and income inequality. At the local government level, service delivery is important, but politics also matters, and consequently, policy implementation at the local level is often chaotic and lines of responsibility are blurred (Leach et al. 1995).

3.2 NPM and South Africa

Like most countries in Africa, the post-apartheid government decided in 1996 to embrace neoliberal policies, which involved the withdrawal of the state in public administration. This policy stance was reflected in policies such as GEAR, adopted in 1996, which greatly influenced the formulation of the White Paper on Local government published in 1998. For services such as water and electricity, proposals to privatise were presented by the government as options for service delivery. However, where third parties provided services and not the government itself, citizens lost their ability to hold officials accountable for poor services. This in turn lessened democratic accountability (Cameron, 2009; Heywood, 2013). According to Heywood (2013), NPM promotes 'Balkanisation'

where political units are disjointed within government, reducing the ability of the legislature to monitor the operations of the executive (Dexter, 1995; Cameron, 2009). These challenges have been evident at the local government level in general and in cities with large administrations such as the City of Johannesburg.

Within the South African context, corporatisation has been criticised for bypassing councillors and introducing corporatised entities operating at arm's length. In so doing, politicians are removed from decision-making processes thereby weakening community participation in the service delivery process (Smith, 2003). From an equity perspective, the model is considered risky firstly because the profit motive tends to discriminate against low-income customers denying them access and exacerbating inequality (Smith and Hanson, 2003). Secondly, local governments[7] cannot effectively monitor private sector operators to ensure equality in delivery (*ibid*) and, thirdly, privatisation models tend to shift power towards technocracies who are often ill-equipped (or unconcerned) to grapple with the political problems of poverty or the equitable distribution of public resources (Kettl, 1997; Smith, 2003; Furlong and Bakker, 2010). Ultimately, the model undermines the democratic accountability of local authorities by restructuring the state in ways that are invisible to the public (Smith, 2003).

3.2.1 New Public Management in Africa

There is a school of thought that most countries in the global south, particularly in Africa, needed a paradigm shift to stabilise economies and shun dictatorial regimes (Vyas-Doorgapersad, 2011). Some argue that it was the fragmentation of modern society and the institutions of the state that called for the restructuring of public service and a move to a new way of governance that involves partnerships with the private sector (Hughes 2012; Hodge and Greeve 2017). The structural adjustment reforms that followed in the mid-1980s were responsible for introducing new public administration in the public sector of many countries in Africa to achieve better delivery of basic public services and to reach out to previously disadvantaged communities (ECA, 2004; Omoyefa 2008). The literature

[7] For example, South Africa' Growth, Employment & Redistribution macroeconomic (GEAR) policy was intended to reduce the role of the state and increase corporate and private investment (Rogerson, 2002)

implies that public administration was not democratic, highly centralised and therefore a hindrance to the free play of market forces. Of interest to this particular study was the principle of contracting out which took the form of externalising the provision of services that were originally provided by the state, for example, Zimbabwe outsourced clinical services (McPake and Hongoro 1995). Apart from contracting out, a very common feature of NPM in Africa has been the introduction of performance management and performance contracting (Dzimbiri 2008). This has particularly been so in South Africa at national government and the current case of the City of Johannesburg in which up to 15 enterprises were created to provide services once provided by the City. The model introduced for water services in the City of Johannesburg was corporatisation, and separate entities were created to provide services at arm's length from the municipality. Zimbabwe combined its customs and taxes department to form a new agent known as Zimbabwe Revenue Authority. Where such agencies or corporations exist, NPM prescribes that qualified personnel be hired, offered better wages, and be incentivised through performance bonuses. Many countries such as South Africa, Ghana, Mozambique, Guinea and Tanzania have introduced pay and grading systems (Clarke and Wood 2001; Vyas-Doorgapersad, 2011).

The literature suggests that NPM reforms have not worked particularly well in Africa, and questions are being raised as to whether NPM is the solution to Africa's problems and whether it is best suited to the values and ethics of African people per se. For example, the ethos of the Batho Pele (people first) in South Africa seems to contradict NPM in many respects such as in the profit motive of corporatised entities. Pillay (2008) argues that NPM may have been an attraction in certain sectors, but most government functions continued to be performed by traditional public service systems.

3.2.2 New Public Management in South Africa

According to Pillay (2008), the South African government made early moves towards adopting the tenets of NPM. This came as a second-best option for the ANC government which decided to retain apartheid bureaucracy rather than eliminating it completely (Fraser-Moleketi, 2006; Chipkin and Lipietz, 2012). As a way of transforming public

service, the government adopted an NPM approach, (Chipkin and Lipietz, 2012). This was realised in the form of two major tools of governance namely the Constitution of 1996 plus the Batho Pele document known as the *White Paper on Transformation of the Public Service* (RSA, 1997). However, in spite of these attempts, there is evidence that efficiency in the public sector has not improved but has deteriorated. For example, Chirwa (2018) and Hoag (2011) have shown that government bureaucracies in Africa are weak, fragmented and largely dysfunctional. As a result, government officials find themselves working under challenging and resource-constrained circumstances (Gupta, 2012; Munoz, 2018). The South African case had other unique challenges in that the democratic government inherited a governance system characterised by racial prejudice. The result was gross inequality in the delivery of services with just a minority benefiting and the majority being excluded. The democratic government thus had the insurmountable task of restoring equality in service delivery. Having a Constitution was not enough; government institutions and municipalities had to practically deliver the services to those in need, particularly in the homelands where black majorities were confined. It has been argued that because South Africa opted for the adoption of NPM in the early years of democracy, the country experienced economic growth but not economic development and the majority of the population has remained poor and underserved (Pillay, 2008). Given its unique socio-political context, NPM reforms in South Africa have not been as successful as in other African countries.

With new public management in South Africa came decentralisation to allow for more administrative authority and hands-on management of service delivery (Cameron, 2009). While NPM had positive aspects, its implementation was highly contested particularly at the municipal level. For example, the corporatisation model adopted by the City of Johannesburg was criticised for commodifying public services such as water and turning citizens into customers. Although the City adopted this approach from a financial sustainability point of view based on the iGoli 2002 Plan (Tomlinson, 1999), the move was heavily condemned by citizens and civic protests ensued (Matlala and Benit-Gbaffou, 2012). These protests revealed some of the major weaknesses of NPM in the South African context. As the country had recently emerged from an apartheid regime with gross

inequalities, a responsive government would be needed. NPM would serve as a solution to accelerate service delivery. However, its tenets were contrary to objective democratic accountability by reducing the ability of the legislature to monitor the operations of government (Heywood, 2013). The implementation of NPM was also viewed as fragmenting and weakening the state, a process that has been referred to as Balkanisation (Heywood, 2013; Zollman, 2021).

Writing authoritatively on public sector reform in South Africa, Chipkin and Lipietz (2012) argue that transforming public service along NPM lines is a complex and difficult task. They go on to show that the NPM model has merits for a case like JW where the agency sits outside the public service, and skilled personnel are paid market-related salaries as a performance incentive. There are thus reservations with respect to achieving the social democratic and developmental agenda that the new democratic government so wished for.

3.3 Governance

In the context of NPM, it is necessary to examine closely the concept of governance. While governance has been defined in many ways, Mhone and Edigheji (2003) argue that governance describes how the apparatus of the state is constituted, how it executes its mandate and its relationship to society, and how it fulfils the substantive aspects of democracy. By focusing on both managerial practices and democratic principles, governance encompasses both the technical and administrative components of delivery (i.e. efficiency), and the social-political processes of equity (Plummer and Slaymaker 2007). Governance, in post-colonial states, is strongly defined by the legacy of systems established in the past. For example, contemporary authorities inherited established bureaucracies that could not easily be dismantled or changed. As such authorities often commit themselves to improving existing systems incrementally or to introducing radical changes where gross limitations may exist. Such moves require an enormous investment and political will. Local circumstances such as an unequal past and the need to achieve equity goals, inform and shape governance.

Kassim and Le Galés (2010) view governance as never fully complete but always work in progress. The case of post-apartheid Johannesburg is case in point where over the two and half decades, the City administration has been shaped and reshaped. Hence, these author emphasize the need to describe and document governance processes and their outcomes. In their view, inequalities are not only outcomes of policy choices, but are also part of the way policies are implemented. For this reason, Kassim and Le Galés define governance as governance as a process of co-ordinating actors, social groups, and institutions to attain particular goals, discussed and defined collectively in fragmented, uncertain environments (Le Galès, 1998), while government is defined in terms of rules of the game, constitutions, organisations and actors, processes of aggregation and segregation, and outputs (March, Olsen, 1995). In his description of governance, Stone stresses the shift away from government to focusing on the more complex architecture of coalitions, networks, and institutions built by multiple agents (Bénit-Gbaffou, 2018). Hence, given the demanding and complex environment of the urban, Le Galès and Vitale (2013) argue that a facilitative style of local political leadership with an outward looking vision is needed. This means that governance is viewed as giving policy direction (Bénit-Gbaffou, 2018).

3.3.1 Authority and Power

Authority and power are essential when considering governance. From a governance perspective, authority is viewed as plural and diffuse rather than singular and central (i.e. the government is not a single site of authority but a constellation of intersecting political affiliations, ministries, and jurisdictions) (Wessels, 2007). Authority can occur in many spheres beyond government, and many of these spheres shape each other as in the case of national and local government. Authorities do not govern in isolation but are themselves governed and circumscribed by superiors and other spheres of authority. Authorities, particularly governments, have spatially defined jurisdictions such as national, provincial, local and municipal governments over a city. These arrangements can have important material outcomes. For example, water delivery may be entirely different between two nearby towns as a result of divergent approaches in the respective municipal governments. Additionally, authorities govern their territories and populations in uneven

ways (Chatterjee, 2004). Those in authority may also use their positions for their own financial or political interests. Rather than enabling development, structures of authority can undermine it, especially where democratic accountability is weak. Governance identifies the blurring of boundaries and responsibilities for tackling social and economic issues. In modern society, the state transfers some of its exclusive obligations to civil society, private sector organisations, and voluntary groups. Hence, the state-society divide becomes increasingly blurred. However, governance emphasises the importance of autonomous self-governing networks of actors that have the authority to issue orders in particular spheres. This means that governance recognises the capacity to get things done without relying on the power of the government to command or use its authority. However, in public affairs management, there are other management tools and techniques that the government uses to steer and guide public affairs (Stoker 1998). Technocratic approaches, such as categorisation, can render complex societies legible (Scott 1998), but these abstractions may also have disabling consequences for those they classify.

3.3.2 Deficiencies of the state

Governance can compensate for certain deficiencies of the state and market in regulation and coordination, but it is never a panacea (Smith and Morris, 2008). The state and the market can fail in social resource allocation, and so can governance. The risk of governance failure, the factors that drive the failures, and how to overcome the failures and build effective governance systems, are active areas of research. Attention has mainly been focused on bureaucracies. From the 1990s, mainstream development has targeted the reform of bureaucracies under the rubric of good governance to ensure that it enabled development and reduced counterproductive tendencies. Measures of good governance would include reasonable control over budgets, impartiality, transparency, and accountability. Performance management systems have been widely introduced to govern the effectiveness of officials following the dominance of New Public Management.

3.3.3 Water governance reforms

The influence of NPM ideas on the water sector across the world has been remarkable. Numerous water governance reforms in both the developed and developing world have

been modelled based on NPM principles (Smith, 2006; Grossi and Reichard, 2008). Following the pronouncement of the MDG goal of universal access to water supply and sanitation services by the United Nations (UN), countries across the world have adopted various strategies to govern this sector and meet this goal (UN, 2005). In sub-Saharan Africa, reforms were desperately needed because the coverage rates for access to water were lower than 60 per cent (UNICEF, 2006). High levels of unaccounted-for water of between 40 to 60 per cent, low tariffs, poor consumer records, and inefficient billing and collection practices caused many water utilities to suffer financial difficulties (World Bank, 1994; Foster, 1996). Proponents of NPM argued that by applying a range of techniques and management practices used in the private sector, greater efficiencies could be gained (Chipkin, 2013). However, these calculative practices suggest efforts that create black boxes which define the 'blueness' or 'greenness' of water quality but prevent further discussion and negotiation over the elements of water services (Rydin, 2012). Most water reforms in African countries have unfortunately involved separating regulatory tasks from actual delivery through management or service delivery contracts supported by centralised regulatory agencies that regulate and monitor the performance of service providers (Schwartz, 2008).

3.4 New public management in the water sector

The case of Johannesburg Water was one of corporatisation. Ultimately, corporatisation begged for regulation, and this is discussed in some detail below.

3.4.1 Corporatisation

Corporatisation is an institutional model that emerged from a wave of neoliberalism expressed in NPM norms and widely adopted by many cities across the world (Smith, 2003; Furlong and Bakker, 2010; Voorn et al., 2018). The model involves converting a public sector water department into a free-standing agency, corporation or enterprise, either as part of civil service or completely independent (Steyn, 1995; Smith, 2006; Grossi and Reichard, 2008; Herrera and Post, 2014; ;; Voorn et al., 2018). By creating an arms-length-service entity, corporatisation altered public institutional structures to accommodate private sector principles by ring-fencing management and finances from

other services (Yarrow, 1999; PWC, 2000; CoJ, 2006). The resultant utility was wholly owned and operated by the state but functioned at arm's length from the government (Steyn, 1995; Smith, 2006; Klein, 2014; Ferry et al., 2018). The utility would operate as a business unit using private sector management principles with very little political interference (Seedat, 2001; Smith, 2006; Herrera and Post, 2014). In other words, corporatised entities are semi-autonomous, having independent boards of directors and all their resources are financially ring-fenced from government and other state agencies (Alan et al., 2001; Smith, 2006; Grossi and Reichard, 2008; Woldermariam et al., 2012).

The corporatisation model prioritises efficiency and cost-recovery mechanisms hoping to make more resources available for providing services to low-income households to meet equity objectives (Smith, 2003; Smith, 2006; Furlong and Bakker, 2010; Herrera and Post, 2014). Proponents of corporatisation argue that by achieving higher productivity through more efficient management and less political interference, local government can enjoy more generous dividends for meeting equity concerns through service delivery agreements (Queensland White Paper, 1997; Smith, 2003; Herrera and Porter, Furlong and Bakker, 2010). To achieve this very aim of balancing efficiency and equity, the South African government introduced Growth, Employment and Redistribution (GEAR) in 1996 (Smith and Hanson, 2003) - a five-year plan that focuses on privatisation and the removal of exchange controls (RSA, 1996).

During the 1980s and 1990s, corporatisation gained global currency as an institutional model for re-engineering public services (Schick 1996; Smith, 2006). The model promised private sector-type efficiency gains in service delivery while permitting state involvement to protect public interests (Reed and Anthony, 2003; Smith, 2006; González-Gómez et al., 2014). Corporatisation thus generated a two-fold relationship between the entity and the municipality. As Klein (2014) argues, the municipality is the owner of the firm and is entitled to potential profits, while the municipality can delegate water services to the government corporation utilising a contract (Klein, 2014:100). However, as Furlong and Bakker (2010) note, the expected benefits are usually hampered by devolving

responsibility without concomitant reallocations of resources, particularly regarding delegation to the local scale.

Overall, three hypotheses are used to support corporatisation, namely efficiency, political insulation, and the social objective. The NPM paradigm considers state-owned enterprises to be intrinsically inefficient and proposes to reduce the role of government in service provision (Parker and Guthrie 1993; Box, 1999; Bozec and Breton 2003; OECD, 2003). By increasing the entity's autonomy, NPM foresees an improvement in performance through an increase in operational efficiency through either competition or subjection to efficient regulations (Christensen and Lagreid, 2006; Smith, 2006; Bilodeau et al., 2007). Efficiency arises from having a legally separate status from government plus organisational flexibility (Bakker and Cameron, 2002; Smith, 2006).

A corporatised entity operates at arm's length, and control shifts from politicians to managers (Berg, 2013). The arrangement is hypothesised to offer very little political interference in the affairs of the entity through the separation of politics in policy development from operations (Smith, 2006; Herrera and Post, 2014). NPM claims that corporatisation lessens political interference, avoids conflating political and administrative roles, and prevents clientelism that may cause political motives to override commercial and managerial criteria (Herrera and Post, 2014). For example, elected officials may want to keep prices low to cater to voters or tolerate non-payment in specific communities (*ibid*). In many developing countries where coverage is low and poverty rates high, there is an additional motive for opting for corporatisation, i.e. social motivation. The corporatised entity is viewed as having improved technical efficiency, enhanced financial viability, and enough capacity for extending water services coverage, particularly to poor and underserved communities (Marty el al., 2005).

3.4.2 Regulation

The introduction of NPM has arguably resulted in a shift towards the regulatory state to keep the corporatised entities and private entities under check and to improve service delivery (Majone, 1994, Ashworth et al., 2002; Cook and Minogue, 2003). Regulation is

intended to be a way of ensuring that efficiency, sustainability and cost recovery objectives are met while simultaneously safeguarding citizens' interests by making services accessible and affordable (González-Gómez et al., 2014). Regulation has also been defined as 'the sustained and focused control exercised by a public agency over the activities valued by a community in a deliberate attempt to steer and enable and facilitate private sector investment' (Majone, 1994). The necessity for regulation arises from the fact that with arm's length arrangements, there is a risk that the distance created between management and government creates incentives that deter utilities from pursuing important social and environmental goals (Furlong and Bakker, 2010). However, successful regulation requires diverse institutional solutions such as formal rules and binding contracts that balance the interests of service providers, shareholders, and the users to be put in place (Barbosa, 2016). Bureaucrats who manage these contracts and professionals who perform this function are known as regulocrats and are often neglected in the analysis of institutions (Cunha et al., 2017). However, they are essential in maintaining sustained control of the public agency, protecting community-valued services, and drawing together a set of actors such as inspectors, auditors, standard-setters, and monitoring agents to oversee the entity (Selznick, 1985; Hood et al., 1998;). Scholars however agree that there is no 'one size fit all' regulatory model but that regulatory frameworks must be embedded within the political economy and governance structures of the relevant sector to create a 'best fit' model (Berg, 2013; Mumssen et al. 2017).

A standard method of regulation is by contract. Regulation by contract is an arrangement under which operational control of an enterprise is vested by contract in a separate enterprise that performs the necessary managerial functions in return for a fee. The contract spells out the conditions and duration of the agreement and the method of calculating management fees. The arrangement brings in outside consultants to oversee all, or part of, utility operations, intending to generate improvements in the financial or technical performance of the utility over a set period (Ghanadan and Eberhard, 2007). Given that drafting perfect and complete contracts is difficult and contract failures are invertible, the regulation of public entities is essential to protect the public interest

(Romano et al., 2017). However, reform experts argue that the ‘devil is in the detail’, which often manifests in the implementation of the regulatory model (Allen and Pryke, 2013).

Apart from regulation by contract, there is also municipal regulation. Municipal regulation is where the municipality regulates and oversees the entity providing services on its behalf (Allan et al., 2001; Mumssen et al., 2017). Municipal regulation can also occur through municipal regulatory agencies (e.g. in Brazil and Ecuador) or through a municipal department located at arm's length from the entity (Mumssen et al., 2017). The municipality regulates and checks the contract and the performance of the company approves tariffs and budgets, and account reports. Arms-length separation is necessary to avoid oversight difficulties and conflation of roles (*ibid*).

3.4.3 Challenges of corporatisation and regulation

Corporatisation has inherent and persistent contradictions that render it undesirable, particularly in the water sector in general and in developing countries in particular (Espoto, 2018). Three issues render corporatisation problematic, namely the commodification of water services, the financialisation of water services operations resulting in cost recovery policies, and the de-politicisation of social goods (*ibid*). As shown earlier, proponents of the model argue that economic principles could benefit low-income households in the long run, but several cases across the world have shown that the model exacerbates social inequality (Smith and Morris, 2008; Herrera and Post, 2014). Corporatisation creates a space where competing interests are negotiated, which increases the complexity of governance (Furlong, 2018). Issues such as keeping arms’ length distance, and defining customer rights and financial sustainability, always create tension between the municipality and the corporatised entity (Furlong and Bakker, 2010; Herrera and Post, 2014). There are also challenges associated with the fragmentation of the sector that hinder coordination, blur the lines of accountability, and infuse competing rationales regarding delivery objectives (Smith, 2009).

3.5 Examples of regulation in the water sector

Despite the inherent tensions, the NPM model of corporatisation is widely practised in developed and developing countries, particularly in the water and sanitation sectors. The reason is that this sector has natural monopoly characteristics that render competition impossible. The sector outputs are of high social and public value, requiring the protection of public interests (Mumssen et al., 2017). The following are examples of how these tensions have played out and how they have been resolved:

3.5.1 Australia

Marshall et al. (1999) observed that in the water sector in Australia, the thrust of reforms in the 1990s were primarily economic, focusing on increasing organisational productivity and reducing costs. New managerial requirements were imposed, and internal structures were opened up to competitive practices. Marshall et al. argue that the emphasis on efficiency, markets, and corporate management procedures weakened the traditional democratic foundations of local government. A preoccupation with service delivery and customer choice has overshadowed the representative functions of local authorities (Marshall et al., 1999). However, Reina's account (2002) of corporatisation in Melbourne suggests that effective regulation enabled the City to address both equity and successfully achieve the efficiency goals of water delivery. The regulation was performed by the Essential Services Commission (ESC), which was a powerful provincial regulatory body (Reina, 2002). The ESC monitored the water cost and performance standards of water services providers in the City of Melbourne (*ibid*).

3.5.2 U.K./Brazil

Evidence from countries such as the United Kingdom and Brazil shows that NPM generated hybrid or sedimented neo-bureaucratic forms of public sector organisations that are internally complex (Farrell and Morris, 2003; McNulty and Ferlie, 2004). While specific structural changes occurred, older functional lines of authority remained, which rendered claims of a post-bureaucratic society misleading (Morris and Farrell, 2007). Rather than replacing old systems, reforms in these countries overlapped with existing systems resulting in bureaucratic hybridism where the old co-existed with the new (Falleti, 2010). For example, in Brazil, regulatory state instruments were laid on top of incumbent

institutions and relied heavily on previous management practices (Dubash and Morgan, 2013).

3.5.3 South Africa

In South Africa, corporatisation was viewed as capable of allowing greater state involvement while promising efficiency gains similar to privatisation (Smith, 2006). Corporatisation offered a solution for redressing inequalities affecting the water sector. However, providing a technical solution to a political issue undermines a fundamental feature of democratisation because of the absence of the mediatory role of politicians (Smith, 2003). Striking a balance between efficiency and social obligations has not been easy, given high levels of income inequality in the country. In the City of Johannesburg, the corporatisation model aimed to increase organisational flexibility and improve financial viability by giving the utility a separate legal existence (Allan et al., 2001; Bakker and Cameron 2002; Smith, 2006). However, it was challenging to retain the public sector ethos due to human resource constraints, insufficient financial resources, lack of political will, and a predominantly poor clientele (Smith, 2006). According to Smith, the critical question for Johannesburg was whether the City had set up an adequate institutional framework to hold its water provider accountable for balancing efficiency gains with equity concerns. With corporatisation, oversight is inherent in the model since the government is both the client and owner (Smith, 2006).

3.6 Conclusion

This chapter dealt with NPM as a development paradigm for restructuring public administration to increase efficiency in service delivery. Although NPM is attractive because it promises efficiency, inherent paradoxes are associated with its implementation. These paradoxes are not easy to resolve. Yet NPM reforms have been widely implemented in African bureaucracies. In the water sector, these reforms have resulted in corporatisation, which is an institutional arrangement that allows services to be provided by independent companies but allows the government to have a level of control in terms of setting policy and monitoring the companies. In order to lessen the impact of the paradoxes associated with NPM reforms, regulation has been used to

control the operations of corporatised entities. However, there are also challenges associated with regulation which include information asymmetry, relational distance, and compliance costs (Hood and Scott, 2000). In order for NPM reforms to be effective, regulation is critical. The clear separation of administrative and political roles within a democratic constitutional framework that allows for a transparent and accountable public policy process is critical for successfully managing corporatised entities (Cook and Minogue, 2003). However, absolute independence from the dominant political and bureaucratic institutions is nearly impossible in developing country contexts (Cook and Minogue, 2003; Herrera and Post, 2014). Further, NPM has caused governments to become more complex due to bureaucratisation, resulting in overlapping mandates between units and individuals. Although NPM masquerades as anti-bureaucracy, its whole tenor has been vastly bureaucratic and relies heavily on audit and performance management to strengthen traditional horizontal structures (Farrell and Morris, 2003; Akhmouch and Correia, 2016; Hibou, 2015).

4 RESEARCH STRATEGY, METHODS AND THE POLITICS OF CHOICE

4.1 Introduction

This chapter considers the means of investigation that were deployed to obtain knowledge, i.e. epistemology. In general, this research looks at the reality of water services governance in the City of Johannesburg, focusing on structure, processes, people, and artefacts. The research focuses on the daily functioning of a city bureaucracy, what officials do, and their constraints and enablers. One approach to this puzzle would have been to administer a questionnaire or to undertake an analysis of documents combined with structured interviews or focus group discussions. Although I had these options available, I was not convinced that my findings would illuminate the work of state officials sufficiently. The public and the media stereotypically portray state officials as inefficient, inexperienced, lazy and corrupt (Hoag and Hull, 2017). I believed that such perceptions were unfair, premature and ill-informed, and lacked sound knowledge of what state officials experience in the daily execution of their duties.

I thus chose a qualitative research design and ethnography because I felt that an ethnographic approach would support the exploration of bureaucratic spaces as sites of culture and practice. I found support for this view from anthropologists Bierschenk and Oliver de Sardan (2014), who argue that states are made up of bureaucracies and public employees whose day-to-day functioning and practices deserve ethnographic scrutiny. They further argue that ethnography is particularly useful when researching the informal practices and pragmatic rules that public officials engage in on a daily basis. As a researcher, this meant venturing into places and spaces where bureaucratic work happens (Muñoz, 2018).

4.1.1 My story

I worked in the water sector for nearly seven years during the 2000s in my home country, Zimbabwe. As an official in the Ministry of Water Development, I was involved in the planning, implementing, and monitoring of small-scale water supply projects in rural Zimbabwe between 1999 to 2005. These projects included small dams, boreholes, and piped water supply schemes to clinics, irrigation schemes, and villages. In my opinion,

the success of these projects depended not just on clear policies and adequate budgets but on people, i.e. the officials who implemented the projects and the politicians who set the policies. Implementation involved sourcing service providers, navigating the state bureaucracy to get the necessary approvals, and ensuring that service providers were paid timeously to avoid delays.

I arrived in South Africa in 2009 and soon joined the Centre of Applied Legal Studies (CALS), a human rights and public interest litigation organisation based at the University of the Witwatersrand. At that time, the Centre was handling the famous Phiri Water court case, also known as the *Mazibuko vs The City of Johannesburg Case,* and was preparing to go to the Constitutional Court[8]. Although I was not directly involved in the case, I was struck by the fact that the residents were asserting their right of access to water through a court of law. In my home country, even though I lived in a high-density township, access to water was a given, and we knew as children that water was not for free but must be paid for otherwise, households were cut off from the mains. The South African case was different. The history of apartheid created a legacy of unequal development, which means that the new democratic government of 1994 inherited an economy in which service delivery was highly unequal. The adoption of a non-racial constitution with a Bill of Rights guaranteeing the right of access to water was a significant step towards addressing the problem of inequality.

However, the *Mazibuko case* epitomised the unequal effects of apartheid and the challenges of reversing this legacy. On the one hand, poor residents needed water services and on the other, the government needed enough financial and human resources capacity to deliver the service on a large scale. This meant that services were to be provided on a cost-recovery basis and due to a culture of non-payment by low-income residents, JW introduced prepayment meters. These meters became a source of

[8] The case concerned the constitutional right of access to sufficient water. Affected residents in Soweto were contesting the lawfulness of Operation Gcin 'Amanzi (OG), a project the City of Johannesburg piloted in the Phiri suburb in 2004 to address the severe problem of water losses and non-payment for water services in Soweto. The project involved re-laying water pipes to improve water supply and reduce water losses, and installing pre-paid water meters (PPWM) to charge consumers for use of water in excess of the 6 kilolitres per household monthly free basic water allowance.

tension between the City and the residents. Although the Constitutional Court of South Africa reaffirmed the right of access to water for residents, it found the City's policies regarding water services consistent with the constitutional provision that obliges the state to take reasonable legislative and other measures within its available resources, to achieve the progressive realisation of the right to water for the people[9]. Consequently, prepayment meters became the norm for residents in the affected suburbs, but the City made sure that JW was adequately regulated and monitored to meet the City's mandate of delivering water service.

In 2011, I joined the Gauteng City-Region Observatory (GCRO), a research organisation based at the University of the Witwatersrand and funded by the Gauteng Provincial Government (GPG). The objective of the GCRO is to provide direct policy support to the government through scholarly research and regular data collection. According to the GCRO, a sound knowledge base is essential for planning and managing state programmes and projects (GCRO, 2020). In line with this mandate, I embarked on a research project to assess the impact of City water policies in the aftermath of the Mazibuko Case. I failed to obtain the water-related data I needed from JW because the company claimed that it was a private entity and reserved the right to share data and information with third parties. When I approached the City to assist with sourcing the data, I was informed that it was difficult to reverse its decision because it was a private entity. At this point, I shifted my research interest towards understanding the governance model of the City regarding its entities. The idea became the subject of my PhD, and I successfully defended my proposal in April of 2017, registering as a part-time student at the University of the Witwatersrand. Negotiating access into the City to conduct the research was very difficult. I spent close to six months negotiating entry, and it took another six months to eventually gain entry into the City's Environmental and Infrastructure Services Department (EISD) to conduct my research. The process of negotiating entry revealed that the formal processes were highly bureaucratic and subject to approval by the City Manager.

[9] Section 27(2) of the Constitution of the Republic of South Africa

4.1.2 Ethnography

Since the pioneering work of Gerhard Friedrich Müller (1705-1783); Malinowski (1884-1942), Margaret Mead (1901–1978), Harry, F. Wolcott (1929-2012) and numerous others, ethnography has increased in importance as an investigative method (Spradley, 1980). The shift I made to ethnography was a chance event necessitated by difficulties accessing quantitative data from Johannesburg Water. However, when I found that access to data from the entity was a challenge even for City officials, I was prompted to ask new questions about how City officials were governing water services with limited access to data.

Given their ability to sort through the contradictions and complexities found in modern bureaucracies or the state in general anthropologists have, since the 1990s, been turning towards analysing the everyday life of organisations. As a result, bureaucrats have been transformed into ethnographic subjects rather than mere executors of official policy, thereby opening up more lines of inquiry regarding the character of and practices within bureaucracies (Bierschenk and Olivier de Sardan, 2019). What has always been speculated about state bureaucracies or state officials can now be revealed by organisational ethnography (Hull, 2010; Muñoz, 2018; Bierschenk and Olivier de Sardan, 2019).

Ethnographic studies of bureaucracies have shown that state officials are engaged in ‘vernacular and unofficial code[s] of conduct’ (Hoag, 2010:7) and ‘thought-work’ (Heyman, 1995:261) in order to stabilise the chaotic environments in which they work. Hoag (2010) argues that a view of state officials could explain why they do things the way they do. Lipsky (1980) also showed how public officials determine the success or failure of public policy because of their ability to exercise discretion. The extent to which such discretion is applied and the results it breeds are best examined through qualitative methods (Bierschenk and Olivier de Sardan, 2019).

I, therefore, chose an ethnographic approach because it permitted the collection of data in a real-world context through sustained engagement in the research site, and making

sense of events by analysing the practices and perspectives of participants. There was also room to use a range of data sources, including observations, informal conversations and life histories, and a focus on a single setting (Atkinson and Hammersley, 1994). As a result, I gained an emic or insider perspective.

4.1.3 Limitations of institutional ethnography

Ethnography is not without limitations and needs to be complemented with other forms of qualitative data collection such as semi-structured interviews, document analysis, and focus group discussions. Achieving representativity and objectivity, and reducing bias is always a challenge when conducting ethnography. Maintaining objectivity by adopting a rational and detached scientific perspective may not always be possible in ethnography, and it is not easy to find the right balance between participation and observation, immersion and distancing oneself (Bernard, 1994; Hahonou, 2019). In my case, total immersion was not possible because officials worked individually in their offices and had limited time for conducting research. I nevertheless managed to achieve some degree of immersion by participating in meetings, informal conversations, email exchanges and prolonged one-on-one meetings (Robben and Sluka, 2007). A combination of unobtrusive participant observation and deep immersion gave room for empathy that enabled me to understand the social life and behaviours of the officials who surrounded me. My research site was a small unit of fewer than twenty people, and I was deeply embedded in the working lives of five of the officials. These officials became windows through which I looked into the culture of the workplace and the working lives of other officials. As the research progressed, I gained experience in conducting ethnography and spent long hours in conversation with officials. Speaking from fifty years of ethnographic experience, Wolcott (2010) argues that ethnography is a lifetime experience that gets better with time.

However, in spite of that, it was not possible as a researcher within the City to have access to all the processes that were happening. Firstly, there was not enough time to be in every unit in the City, and secondly, some processes such as Mayoral Committee meeting, JW Board meeting happened behind closed doors. Thirdly, some processes that were not

formal were not easy to detect and record. Consequently, the claims made in this thesis are based on the information gathered in spaces that could be access.

4.1.4 Positivism and social constructivism (deductive and inductive reasoning)

The potential bias and limitations of ethnography warrant a discussion on the research paradigm dichotomy between positivism and social constructivism. Research paradigms guide scientific research through a set of assumptions that have to do with defining the research object (ontology), how to study it (epistemology), and the methods used for data collection. The first paradigm is known as the positivist approach, which is based on the notion of the absolute truth of knowledge (Phillips and Burbules, 2000). The majority of positivist researchers rely on qualitative methods and deductive methods to a priori hypotheses, framed quantitatively (Park et al., 2020). Positivism assumes that a single truth exists with a definite causal relationship and that knowledge of this truth is objectively deduced without the impact of values or other influences. This means that the methods are implemented in settings where variables are controlled (Park et al, 2020). On the other hand, social constructivism is an inductive approach in which no single truth is assumed. Rather, the approach holds that cultural and contextual aspects influence the construction of knowledge (Derry, 1999; Kim, 2001). Knowledge is created through interaction and is shaped by a wide range of external forces. For this research social constructivism relied heavily on qualitative methods. Ethnographic methods fall in the latter category as they allow the researcher to immerse himself or herself into a cultural setting in order to come up with their own interpretation.

4.1.5 Choosing the research site

My research site was the Water Services Regulation and Policy Development Unit (WSR&PD), which is a subunit of the Water Resources and Biodiversity (WR&B) unit in the Environment and Infrastructure Services Department (EISD). EISD is one of the 10 line departments in Johannesburg, shown in Figure 3. EISD is headed by an executive director and comprises five units, each headed by a director who reported to the executive director. These units were further broken down into subunits such that for water, the WR&B consisted of four subunits, of which WSR&PD was one. Since my interest was in

water services, I was directed to WSR&PD. My object of study, i.e. water services, therefore, determined the site of my research.

The mapping of departments, units, and subunits was done using official documents and discussions with City officials. The version which I generated is far more detailed than the abridged version found in the City documents public domain. The structure shown earlier in Figure 1 was in place during the time of my research and was created in 2011 following an institutional review ordered by the then-mayor, Parks Tau (CoJ, 2011b). The highlighted areas represent the water sector of the City.

4.2 Accessing the field

It was through efforts to access the site that I discovered the City's structure. Accessing the site had two phases, namely the primary phase, which involved getting the required formal permissions in writing, and the secondary phase, which involved building relationships to gain access to people and information within the organisation (Brannick and Coghlan, 2007). These processes opened the door to the City and enabled me to freely conduct my research and collect as much information as I required from individuals, policy documents, and reports.

Feldman et al. (2003) note that gatekeepers are a challenge to both researchers and officials alike such that the insider researcher needs to strike a balance between research requirements and the expectations of principals in the research site through bargaining (Brannick and Coghlan, 2007). I negotiated access using personal, social and institutional networks as noted by Gill and Johnson (2002), Feldman et al. (2003), Hammersley and Atkinson (2007) and Bryman (2012), In some cases, I took chances by calling people in City and obtaining access through front-line employees such as receptionists or even top managers whom I encountered at seminars, or other officials with whom I had previously interacted professionally.

Fluency in the native language is critical for ethnography. Otherwise, communication will be difficult, and the researcher may not make sense of events. Being fluent in *isiZulu,* one

of the commonly spoken languages in Johannesburg eased the process of entry and research because I got around without the help of an interpreter. Although I conversed in English most of the time, knowledge of *isiZulu* proved to be an asset for gaining the participants' interest.

4.2.1 Snowballing

I used the snowball method based on previous relationships with City officials. For example, I worked on a joint project with officials from GSPCR and spent over six months researching this unit. A colleague at GCRO had vast experience in the water sector and knew several people in the City and ex-officials now working elsewhere, for example, the South African Cities Network (SACN) and KPMG Consulting. This process is illustrated in Figure 4 below.

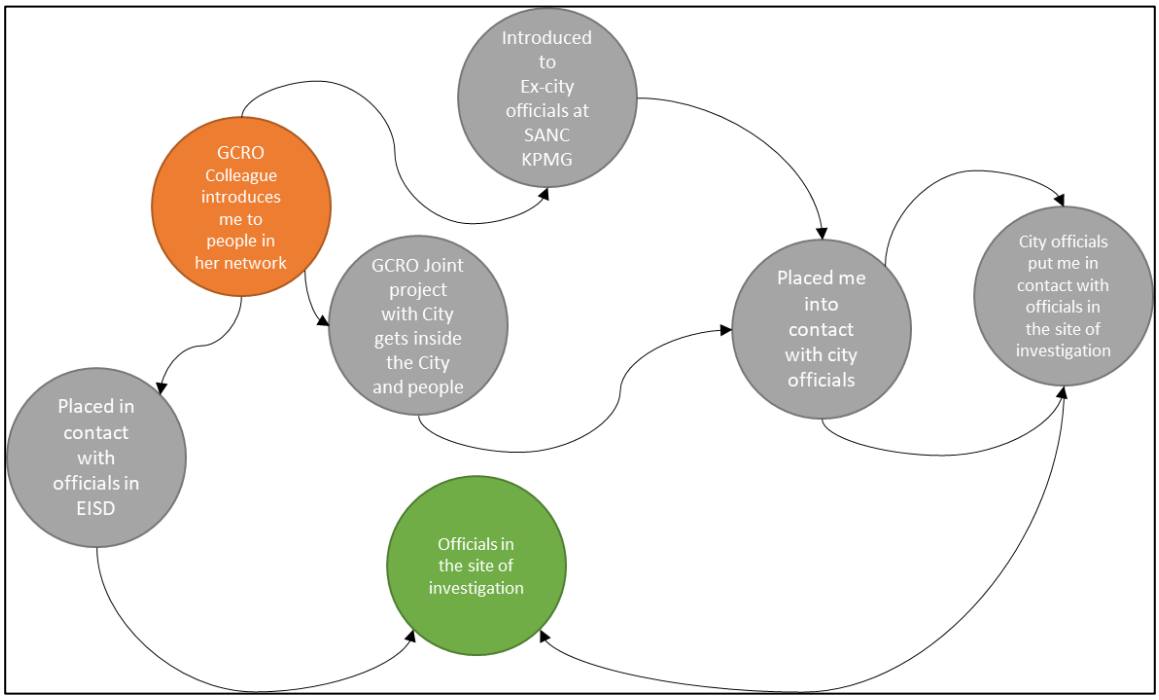


Figure 4: The snowball exercise utilised to access the City

The City is a vast institution of over 30 000 employees and comprises complex bureaucratic units such that officials hardly know each other. Getting the right people in the City required investigation because the City's published structure only showed top

executives who had little interest in issues such as research requests from an outsider unless initiated by them. The door was opened after I got into contact with a particular official in EISD, which I shall refer to as Goodluck (not real name). There was a common interest in my topic of research, and the official had an interest in the results. Through Goodluck, I was introduced to officials in WR&B through a meeting arranged by him. However, whereas Goodluck acted informally by allowing me in, other officials preferred more formal procedures, which involved applying for permission from the City Manager. It is possible that these officials feared being monitored and so used the formal route as a delaying tactic. It is also possible that they feared getting into trouble for speaking to researchers without formal consent. Meanwhile, Goodluck saw it as an opportunity to gain control of his subordinates and used his discretion based on the knowledge that formal routes were cumbersome and time-consuming.

Goodluck was also aware of the fact that formalities could be dealt with in retrospect because cases of student researchers, such as mine, were not under strict surveillance by the City's central administration. Granting access was understood differently at different levels of the organisation, and this is very common (Hoag and Hull, 2017). Gatekeepers at various levels of an organisation attempted to shut the door despite approval by top management because the gap between them allows for discretion (Lipsky, 1980; Hahonou and Martin, 2019). As a result, it took nearly seven months for me to walk begin conducting my research, which called for patience and perseverance. One official, in particular, was not keen on having someone come in and observe officials at work.

However, given that Goodluck had an interest in the research as a way of monitoring her own work, the research proceeded to the extent that the arrangement was transactional, with me giving back to the organisation through doing actual work (Cunlife et al. 2016; Bierschenk and Olivier de Sardan, 2019). I did not have a specific contract defining my work, and the terms of my presence were outlined in a letter of approval (See Annexure 1). I thus worked together with officials as and when there was work to be done. My first task was to review by-laws on various aspects of water services. The existing by-laws

were outdated, and the review was urgent. As a result, I was viewed as an additional worker for completing this work in time. However, I was also a fly on the wall; a mode of observation that draws little or no attention from those observed (Okely, 2007; DeWalt and DeWalt, 2002; Hahonou, 2019). By examining the by-law documents, I understood various City policies regarding water services. However, the initial encounter proved that one has to be flexible in ethnography as there are many unexpected encounters.

Formal strategies for gaining access are not sufficient in securing full access; informal social relations played a critical role in facilitating entry, as observed by Beek and Gopfert (2011). At times, I used my affiliation to the GCRO, a respected Research Centre based at Wits University, to smooth the process of access in order to be viewed more as a friend than an enemy (Bierschenk and Olivier de Sardan, 2019). However, it is common in such research that gaining access is difficult, to the extent that negotiating access becomes part of the research.

4.2.2 Dissecting the research site

Designing my research in terms of these three dimensions, i.e. organisation, group, and individuals (Nzinga, 2013) opened up a window for incorporating structure, people and culture into my analysis. It also allowed me to bring in other players involved in the oversight and regulation of Johannesburg Water, including the Mayor, the City Manager, the Monitoring and Evaluation Unit (M&E), and the Group Governance Unit, which manages the City's service delivery agreements with entities. Although these individuals and units were located outside my actual research site, their inclusion in the analysis completed the picture (albeit a fragmented one) of water services governance City.

4.2.3 The organisation

The city's many unique and extreme characteristics combine to make Johannesburg a suitable site for studying any aspect of the urban landscape, particularly in the global south. Besides, Johannesburg has a unique history related to water privatisation that makes an interesting study, particularly the MoE model that gave birth to Johannesburg Water. This model was not without challenges, and the latter were investigated in terms of how they shaped the City's governance structure and officials' practices. The

uniqueness of the case had the intrinsic value of yielding a nuanced understanding of this phenomenon (Miles and Huberman, 1994; Creswell and Poth, 2018). Although unique, a critical study of the case provided an opportunity for gaining deeper insights into the research problem in a context that allowed for generalisation on a broader class of similar cases (Gerring, 2004). However, I could not access Johannesburg Water for an ethnographic study and consequently focused my attention on City officials in terms of how they relate to Johannesburg Water.

4.2.4 The group: Environment and Infrastructure Services Department (EISD)

Through a snowball process, I landed in EISD, which was the City's line department responsible for water services. On the City's published organogram Johannesburg Water was presented as falling directly under EISD. Given these ready-made bureaucratic borders and functions, there was no need to construct an object of study because it pre-existed (Bierschenk and Olivier de Sardan, 2019). Undertaking analysis at a group level was of prime importance since the water services sub-unit did not act in isolation. Table 6 below shows the constitution of this group (the middle column). Three municipal-owned entities fell under EISD, namely Johannesburg Water, City Power and Pikitup.

Table 5: Dissecting the field

Organisation	Group	Individual
City of Johannesburg - Council - Mayor's Office - City Manager's office - Group functions - Line departments - Units - Subunits - Municipal owned entity	Environment and Infrastructures Service Department (EISD) - Water Resources and Biodiversity Unit (WR&B) - **Water Services Regulation and Policy Development Subunit (WSR&PD)** - Policy Coordination Directorate - 3 Municipal owned entity (**Johannesburg Water**, City Power and Pikitup)	Staff in EISD - Directors - Deputy Director - Principal Specialist - Office Assistants

Source: Author based on various CoJ planning documents

Formally, EISD required a staff complement of 131. However, at the time of research, the department had a vacancy rate of 49 per cent, and the Democratic Alliance-led administration (2016-2019) had placed an embargo on new appointments. The department comprised five units, which included WR&B, each with several subunits. I was directed to the Water Services Regulation and Policy Development (WSR&PD) sub-

unit responsible for regulating water services. In the City, water services refer to potable water and sanitation services to households and businesses. I felt disappointed when I discovered that I spent months trying to access a site consisting of only three officials. However, this surprising detail deepened my curiosity as I became anxious to know how such a small team performed such a huge and critical task on behalf of such an extensive city administration. This shifted my attention towards the individuals, i.e. the officials.

4.2.5 The individual: the officials

In June 2017, I finally commenced my fieldwork in the City offices where the WR&B and its sub-units were located. I was allocated a vacant office next to the boardroom, which was generally reserved for interns, and the entire unit comprised 16 officials spread across various sub-units. The post of WR&B Director was vacant at the time, and the various sub-unit heads (or Deputy Directors) were taking turns to act as Director of the unit and reporting to the Executive Director of EISD. I was attached to the WSR&PD sub-unit, which consisted of a Deputy Director and two Principal Specialists (3 officials). I was introduced to all staff members by the Deputy Director because the entire sub-unit regulated JW on some specific aspect of water, whether resources- or services-related. To fully understand the oversight and regulatory role of the City over JW, it was necessary to be acquainted with all aspects of water, including policy coordination and finance.

4.2.6 Positionality

As I entered into the field, I was sensitive about my disposition as an economist and that a drastic shift in mindset was needed to see things differently. I needed a new analytical lens, and it was a very uncomfortable space to be in. However, through literature, I learnt that this was a normal phase in the life of an ethnographer who crosses disciplinary boundaries. As a quantitative economist, I tended to want to count things, but I worked towards making this radical change by reading literature on ethnography and testimonies of those who have conducted ethnographic studies to avoid quantitative bias. I developed a diary on my computer from the outset, where I recorded all my daily experiences, observations, and conversations. At the end of each day, I also recorded reflections on my experience. I kept a voice recorder, which I used to capture more extended conversations, interviews, and discussions. As Lawlor (2003) recommends, I developed

a new stance and a new gaze the more I became immersed in the field. Slowly, my quantitative biases were suppressed as I spent more and more time with officials and reflected on their stories, which, although sharing many everyday things, were unique. I also understood that everything around me was data but that I needed to develop the right analytic lens to focus my attention on the core issues of my research as advised by Jerolmack and Khan (2017). Through this advice, I began to view things differently in the organisation. I cannot claim that I become a seasoned ethnographer, and I surely could do better if given another opportunity.

4.2.7 Ethics of fieldwork

When conducting fieldwork ethical standards such as informed consent must be followed to avoid harm to the participants (Hoag and Hull, 2017). My research was approved by the university's ethics committee and, in addition, I was granted official approval to conduct participant observation and agreed on upfront to address ethical concerns. On the first day in office, I introduced the purpose and method of my research to all the officials and all of them consented. Most of the officials viewed this research as very important and hence I had a chance to sit in meetings and gatherings, and to conduct interviews. Therefore, through informed consent, I made sure that I disclosed the purpose of the research. Incomplete disclosure is a form of deception that directly impacts the subjects' ability to make voluntary choices to either participate or withdraw from the research (Schrag, 2009). These were issues I had to deal with during fieldwork to avoid harming my participants, and my recordings were stored on a computer only accessible via my personal access code.

4.3 Primary data collection

My research draws on fieldwork and documentary analysis conducted in Johannesburg between November 2016 and June 2018. From June 2017 to November 2017 (6 months), part of this period was spent in the City of Johannesburg's offices in Braamfontein where I conducted ethnographic research. While stationed there, I had access to other City departments and collected additional data to corroborate what I found in my leading site. I conducted a total of 61 semi-structured interviews. Thirty-four of these were conducted

with ex-city officials (7), officials in the City but outside EISD (14), Johannesburg Water officials (3), academics and/or experts in the water and public sectors, general (10) and the rest (27) were conducted with officials within EISD. I also attended 13 meetings, 12 of which were within EISD and 1 with external partners in Pretoria, and two conferences organised by the Water Research Commission, a research body established to coordinate water-related research in South Africa. I also attended an address by the then-new City Mayor, Herman Mashaba, during one of his visits to EISD. Table 7 below shows the stakeholders, and the list of people interviewed is given in Appendix 2.

Table 6: Interviewee count by stakeholder

Stakeholders	**Total interviewees**
City of Johannesburg officials	41
Ex-City of Johannesburg	7
Johannesburg Water	3
Academics and water experts	10
Total	**61**

4.3.1 Phases of the research

The research period was divided into three main phases, as illustrated in Figure 7 below. During this period, it must be noted that the local government elections held in August of 2016 led the City to form a coalition administration. The main opposition party, the Democratic Alliance (DA), had won the elections but was forced into a coalition with the Economic Freedom Front (EFF) party because its votes fell short of an outright majority. As a result, the political atmosphere was highly charged at the executive level of the City administration as the new mayor embarked on radical programmes, appointed new heads of departments and entities, and declared war on corruption. However, this did not affect my data collection as these developments occurred at the top level of the administration.

Figure 5 below shows the three main phases of my research. The entry phase (November 2016 to June 2017) was mainly locating the research site and negotiating entry through email exchanges, telephone calls and visits to City offices. I recorded all the encounters in my diary and treated them as data for my research.

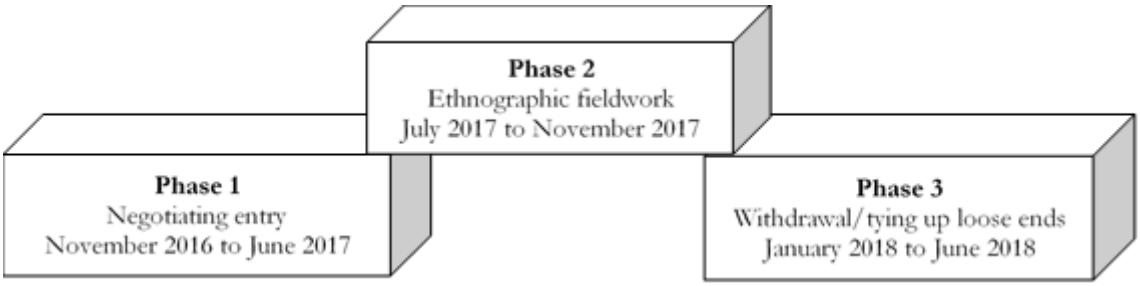


Figure 5: Research phases

During this period, I also conducted interviews with City officials outside of EISD to get preliminary ideas on how the City was configured and how it operated. Before that, I engaged with officials from the City's Group Strategy Policy Coordination and Relations (GSPCR) unit, and this made the negotiation process easier since I knew a few people in the City. The second phase was data collection, and following ethical approval by the university, I was granted permission by the City to conduct the research. The greater part of this phase was spent in the City of Johannesburg offices. I gathered data through participant observation, participation in meetings, performing work tasks, email communications, interviews with officials, discussions and analyses of City documents.

The third phase is what I call the withdrawal phase. On completion of fieldwork, I decided to maintain ties with the City officials instead of complete withdrawal. Having gathered large amounts of data, I foresaw the need to return at a later stage either to verify, re-interview some officials, or ask specific questions arising from the data analysis process. I made four post-fieldwork visits to the site to discuss and verify some of the findings and ask further questions. I re-interviewed the Deputy Director for the M&E unit and interviewed, for the first time, the Director for the Group Governance Unit, an Advocate who served as the City's shareholder representative in the entire City's municipal-owned entity including Johannesburg Water. This official was the missing link during my analysis of the institutional structure and the regulatory role that the City played over Johannesburg Water. During this phase, I transcribed some of my interviews, began the coding process, and analysed official documents. Some preliminary analysis and

reflections accompanied the process of data collection. Corbin and Strauss (2015) argue that such a process enables an iterative theorisation as one begins to undertake initial coding and theme identification.

4.3.2 Sites of data collection

Table 8 below shows the various City departments and Units from which I collected data and a brief description of each site.

Table 7: City Departments and units

Department/Unit/Subunit	Description
Water Resources and Biodiversity (WR&B)	This was one of the five units within EISD. The unit oversees and regulates Johannesburg Water on various aspects of water. The unit consists of four subunits with a total of sixteen officials, two of whom were interns. I spent six months working, observing, discussing and interviewing officials here. There was not a permanent unit head during the time of research.
Water Service Regulation and Policy Development (WSR&PD)	This was one of four subunits that made up WR&B. It was the unit responsible for overseeing Johannesburg Water on matters relating to water services. The subunit had three officials whom I worked with. I conducted observations, semi-structured interviews, held discussions, chats and attended meetings both internally and externally.
Open Space Planning	Another sub-unit of WR&B responsible for stormwater management. Apart from observing, I conducted a semi-structured interview with officials in this subunit.
Water Quality and Catchment Management	A subunit of the WR&B responsible for monitoring water quality in Johannesburg rivers. I conducted semi-structured interviews with the officials.
Biodiversity Conservation and Management	The fourth sub-unit of WR&B. The sub-unit head at the time was also the acting Director of all WR&B. I did not interview any officials in this sub-unit. I sent requests for interviews, but those approached stated they were busy. I did not pursue these because biodiversity was not my main interest.
Strategic Coordination Directorate	This Directorate was responsible for coordinating the strategies of the various units within EISD to ensure they are aligned to the City's strategic goals. I had numerous one-on-one discussions and a semi-structured interview with this official, who was also acting as Executive Director of EISD at the time.
Finance Directorate	I conducted a five-hour interview with the Finance Director for EISD. The interview was very rich in distilling the work culture in EISD and the factors that affect these work cultures.
Group Strategy Policy Coordination and Relations (GSPCR)	GSPCR was responsible for drafting the City's long-term strategy. I conducted semi-structured interviews and focus group discussions with three deputy directors, one of whom was very senior and had been with the City since the 1990s.
Monitoring and Evaluation (M&E).	This was a sub-unit within GSPCR responsible for monitoring progress towards achieving IDP targets and generating the City's annual report. I conducted semi-structured interviews with the Director and the Deputy Director.
Group Governance (GG)	Group Governance was responsible for managing the Service Delivery Agreement with the Municipal owned entity. I conducted a semi-structured interview with the Director, who served as the City's representative in the Municipal owned entity.
City Manager's Office (CM)	An effort to get access to the City Manager failed. His office gave no specific reasons. Information about this office was gathered through the perusal of City documents and interviews with other City officials.

Office of the Executive Mayor (EM)	I conducted semi-structured interviews with three officials employed as Special Advisors to the Executive Mayor, Parks Tau, during the foundational phases of my research. Access to this office during the DA-led administration was difficult because of the tense political atmosphere.
Member of the Mayoral Committee (MMC)	The MMC is the political head of EISD. Despite several attempts, she could not avail herself for an interview. In the new administration, the MMC was dismissed within a few months of assuming office due to disagreements with the new Mayor.

Source: Author compilation

4.4 Data collection methods

Although I present my methods here as distinct activities, it was not so in the field. I deployed methods as the occasion called. Some informants were willing to give information about practices and rules in the organisation and other not directly observable events. Some officials shared their autobiographies and opinions regarding their work and the organisation. I also collected important City documents. Most of the activities and interviews were not planned but occurred randomly and ranged from five minutes to over an hour. I used the three main qualitative research methods: participant observation, informant interviews, and document analysis to collect data on the organisation, the officials, work processes, and documents (Creswell and Poth, 2018). Having discussed interviews in earlier sections, I focus here on the remaining two.

4.4.1 Participant observation

Participant observation was the dominant method I used, typical for any ethnographic study (deMunck and Sobo, 1998). Using this method, a researcher becomes the research instrument (Creswell and Poth, 2018). However, the researcher needs to select what to observe and what to ignore (Spradley, 1980). Since I was also involved in the work process, I became both a researcher and a participant, and I took care to observe as much as I could. I was immersed for an extended period in the day-to-day lives of the officials. During this time, I talked and interacted with officials and observed their actions, behaviours and routine activities to produce a written photograph of the situation studied (Erlandson et al., 1993). Combining methods simultaneously was not an easy process. At times I was not sure if I was doing the right thing but found solace from reading Dewalt and Dewalt, (2002), who describe ethnographic fieldwork as active looking, improving

memory, informal interviewing, writing detailed field notes and, perhaps most importantly, patience.

Various authors describe participant observation differently, signifying its complexity, subtleness, and multifacetedness. As a data collection method, it lends itself to narrative analysis (Cresswell and Poth, 2018; Yin, 2009). I was able to both observe and participate, and through exposure and involvement, I was able to decipher information about the City, its various units, and the officials in their natural settings (Dewalt and Dewalt, 2002). This allowed me to generate a peopled ethnography where a narrative is derived using vignettes, field notes, interviews, and artefacts used by group members (Fine, 2003).

Participant observation also requires a certain amount of impression management (Bernard, 1994). I first established rapport by immersing and blending myself into this community of officials in ways that caused its members to act naturally, for example identifying myself as one of the City officials and participating actively in work meetings. However, as Bernard (1994) recommends, I eventually had to transition out of the community of officials and immerse myself in the data, analyse what was happening, and write as objectively as possible. This required an open and non-judgemental attitude since the process of observation extended beyond natural conversations and interviews. I became a careful observer and a fair and open-minded listener actively participating in meetings and project discussions. Officials took me as an insider and began asking me questions about the group and even including me in their gossip. At this point, I was convinced that it was time to leave the field as recommended by Fine (2003). My rapport with some informants grew to the point where they would gossip about other colleagues and use the phrase ‘between you and me’ very often. Data collected through participant observation was mostly from meetings held in the office, seminars, and sessions with external consultants, general conduct of officials in the office, corridor discussions, and behaviours during one-on-one sessions. I also had long conversations with a few officials gathering critical information about organisational culture through observation.

4.4.2 Document analysis

Documents are the lifeblood of the City's operations, and analysis of the City practices and structure cannot be complete without looking at its documents. Organisational and institutional documents have been a staple diet for researchers, and more and more research is resorting to documents as data sources (Bowen, 2009). Before and during my fieldwork City documents were an essential source of information about the City, its structure, plans, and achievements. Given that the City generated many documents, it was not easy to choose which ones to analyse as they were continuously revised. Hence I made sure I got the final published version each time. Most of the documents were easily accessible from the City website because municipalities in South Africa are required by law to publish them.

Given that most documents were publicly available, creating an archive was easy and free of the hassles of seeking consent (Rapley 2007). However, others were only available internally, e.g. Assessment Reports, Mayoral Lekgotla Reports, draft policy documents, publications on water research done by external partners, internal communications, flyers, maps, and posters. Bowen (2009) argues that documents take various forms and are not limited to formal documents only. Analysis of documents helps find convergence through triangulation with other methods, hence generating credibility and reducing bias (Eisner, 1991; Patton, 1990; Bowen, 2009). A description of the documents that were analysed is in Table 8 below.

Table 8: City documents analysed

City Documents		
Category	*Document type*	*Data analysed*
Planning documents	Growth and Development Strategy (GDS) 2040. First developed in 2006. Prior, planning was fragmented and sectoral, and numerous plans existed. The GDS offered an opportunity to consolidate all of these into a single cross-City strategy (CoJ, 2011).	This is the City's long term plan and strategy describing the type of society the city aspires to achieve by 2040. Spells out the City's vision, mission, principles and values that guide City planning, expected outcomes and outputs and the indicators for measuring. All departments have to take a cue from the GDS, 'It is our bible'.
	Integrated Development Plan (IDP) (legislated)	How the City's long-term strategy and goals are broken down and translated into implementable programmes for a specific term of office. Forms the basis of budget allocations. It is continuously reviewed to take account of changes occurring in the macro-environment, e.g. population change, changes in national policy, changes in City strategy and goals, and this affects departmental plans, targets and budgets.
	EISD Business Plans 2011-2018 (legislated)	Outline of how GDS vision and IDP targets get translated into specific line departments. EISD is tasked with ensuring sustainable development. The plans outline its mandate: to regulate, monitor, and influence sustainable use of natural resources, protect the environment, facilitate infrastructure planning, and reduce resource consumption, focusing on the two municipal entities, Joburg Water and City Power. Its primary function is policy development, regulation and monitoring. It is not an implementation agent or a service delivery agent. It says nothing about enforcement.
	Water Services Development Plan ('It is like an IDP for water')	Water services five-year plans as agreed between City and the entity. Joburg Water usually ignores these plans because it has a long-term infrastructure plan.
	Service Delivery Agreement (SDA) (Legal contract between the City and Johannesburg Water signed by the City Manager and the board's chairperson and managed by Group Governance).	The relationship between City and Joburg Water. What the City expects from the entity regarding service delivery levels and standards. The City is the sole shareholder, and Joburg Water renders services on behalf of the City. The constitutional responsibility lies with the City. The agreement specifies consequences for Joburg Water in the event of non-compliance.
	Service Delivery Budget Implement Plan (SDBIP)	An annual plan on how the budget gets implemented for that financial year. Outlines what the City and Joburg Water intends to do.
Policy	CoJ Governance Framework	Outlines how the City should be structured and rationale, e.g. a group approach was adopted for 12 reasons, and it is hard to imagine why these could not be handled at the departmental level. Information on governance is also published regularly in the IDP and annual reports such that it is possible to trace changes over time and the reasons for the change.
	CoJ M&E Framework	The first of its kind in the City, but it was still in the draft stage during the time of research.
	CoJ Sanitation Policy (2000)	How the City intends to provide sanitation services and the rationale. The current policy was outdated and out of sync with the values of the GDS and the changes in the macro-environment.
Reports	Annual Reports (2002-2018)	City achievements for the year. A strict requirement of the Municipal Finance Management Act, 56 of 2003 (MFMA). To be produced without fail. Tracks progress over time. Gives the financial and non-financial performance of the City and its entities.
	Mayoral Lekgotla (Report on proceedings)	An internal document detailing what happens in these meetings, what is discussed, the resolutions and who said what. E.g. officials discuss why previous resolutions were ignored, and people adopt a Business As Usual attitude.

	Blue Drop Report	Water quality assessment report. Ethnographic evidence shows that this report is not entirely about water quality but about whether the City has complied with various regulations, e.g. having a plan in place. This gives a wrong indication to the public that the City's water is clean.
	Assessment (MuSSA) of Water Services Report + an Excel sheet of the questions asked in the self-assessment. Depends on honesty as you will be scoring yourself. MuSSA feedback report – By DWS wrote to Mayor, City Manager, CFO and tech people	A self-assessment tool developed by the national department to highlight the areas where the City is lacking based on their responses and suggest ways of improving. The result is forwarded to National Treasury, the Presidency, and CoGTA for their consideration and possible follow up. This is a standard report that is worded the same each year.
	Environment and infrastructure services department October 2017: quarterly performance assessment first-quarter performance assessment by EISD (water services unit): Joburg Water (Johannesburg Water) period: July 2017 – September 2017.	Officials' assessment and opinion of Joburg Water performance prepared for the Executive Director and the MMC. Compares achievements against the KPIs. This process is what is implied by regulatory and oversight. They do not worry that targets have been achieved or not, but Group Governance does it although officials here carry out site visits to verify what is reported.
	Oversight Report	Official City Report on progress to the Municipal Public Accounts Committee.
	End of term review	Legally, at the end of each mayoral term, the outgoing mayor produces an end of term report, which is a 5-year report of programmes implemented and progress made. The report gives detailed summaries of what was reported in the annual reports. It provides a consolidated picture of everything, including significant changes in policy and structure.
	CoJ Institutional Review 2011	Provides the rationale of the review, changes made to the structure and the rationale, e.g. why the Group Approach was adopted.
Other documents	Terms of reference: a proposal to review water services by-laws.	This was part of my assignment to give comments to the ToRs.
	CoJ organogram	Official structure of the city.
	Budget certificate	Certifying compliance with budget preparation rules.
	Customer satisfaction survey and questionnaire	A survey by the City to check levels of satisfaction with service delivery. More of a political tool to check the mood of the residents done since 2005 and is presented only to the Mayoral Committee.
	EISD Budget Programme (Excel sheet)	Shows how budgets are distributed within EISD. I attended one budget meeting.
	Budget Locking Certificate	Signed by City Manager to show that all conditions for preparing budget are met for submission to treasury and copies sent to Auditor General
	EISD IDP/Business Plan Process (Annual calendar)	Running from October to March of each year. It shows a very structured process of generating these plans. The official must ensure that they meet the deadlines.
	National Regulatory Performance Management System	States how municipalities are to regulate water services. To compare with what the City does.
	Hotspots monitor	Mayor's strategy to monitor service delivery protests.
Johannesburg Water Documents		
Planning	Joburg Water Business Plans 2006-2018 Published annually since 2006.	A crucial document on the entity showing its history, vision and mission, its strategy, focus areas, targets and achievements. Ideally, the key priorities should be aligned to the City's IDP and Business Plans.
Reports	Joburg Water Annual report	Progress towards achieving targets.

	Joburg Water Quarterly report to EISD	A report by the Managing Director on the entities achievement, challenges and how they were resolved.
	KPI verification matrix	How Joburg Water calculates its performance measure. The city is not involved.
Policy	Water Supply and Sanitation Policy – White Paper.	National norms and standards for water service delivery.
	Review of Sanitation Policy WRC	Suggestions of how to improve sanitation
	Audit Reports by AG for Joburg Water	Compliance to accounting procedures.
General		
Letters and other communicat-ion	Letters from the Department of Water and Sanitation	Communication from national over specific issues that need attention. Directed to City Manager.
	Emails	Internal communication, how officials relate to each and how work-related issues are treated.
Templates	National Treasury templates 1.1 Budget reporting requirement checklist 2.1 SDBPI Circular MFMA Funding compliance guide 3.1 Standard operation procedures checklist	The purpose of the Standard Operating Procedures (SOPs) is to assist designated employees, effectively and efficiently, with the operational management aspects. Finance Department of a municipality, following best practices. This ensures that every person who performs a task does it in the same correct manner every time it is performed.
	Annual Report template32141)	This is just a list is for municipalities if they are to satisfy treasury conditions. Tick box exercise with 91 items listed.
	Newspaper articles	Water stories across the City. What the City is doing, proposes to do, its failures

Working through these documents and combining them with interviews, the City's structure and functions became clearer. Using this information, I generated a version of the organogram that is more detailed than what is published. In reality, the City's bureaucracy is very complex. Through the analysis of documents, I understood the rationale behind some major City projects such as Corridors of Freedom and Jozi at Work. Merriam (1988) argues that documents help uncover meaning and develop an understanding directly related to the research problem and is an excellent way of corroborating data from interviews and participant observation. Documents capture aspects of institutional memory, and the City documents I reviewed provided valuable contexts on how changes have occurred over time (Bowen, 2009; Yin, 1994).

Analysing the selected documents was demanding but also very rewarding. They were free and electronically available, making colour coding easy. I was also able to read them several times, applying the right analytical lens and gathering relevant information (Jerolmack and Khan, 2017). There were minimal variations in the way reports were structured and worded. Strikingly, the wording was very similar from year to year and even after a change of administration. I used thematic analysis on the documents based on themes identified from my interview transcripts and identified patterns that could be turned into categories for analysis (Fereday and Muir-Cochrane, 2006). As argued by Bowen (2009), I concentrated on eliciting meaning, gaining understanding, and developing empirical knowledge. Given that most documents were publicly available, creating an archive was easy (Rapley, 2007).

4.4.3 Miscellaneous methods

In addition to conducting interviews, observing and reviewing formal documents, I also collected data through physical artefacts such as posters on office walls, the State of the City Address by the mayor, and audio-visual materials such as news clips on YouTube - as recommended by Creswell and Poth (2018) and Yin (2014). For example, I transcribed a SABC news clip posted on YouTube in which former Mayor Mashaba was interviewed, and I subjected the transcript to the normal coding process.

4.5 Data analysis

I did not wait to complete fieldwork before analysing my data. While in the field, I conducted preliminary analyses since the office was very busy. I used quiet times to read my diary and write analysis notes based on the data.

4.5.1 Embedded analysis

Data analysis can either be holistic or embedded (Creswell, 2018). An embedded analysis is where various information sources are used to make sense of a particular finding (Yin, 2003; 1995). I used this method because analysis happened at the same time as data collection. In order to bring out the nuances of specific aspects emerging from the data, it was necessary to use embedded analysis. For example, I combined information from interviews with information from official documents to describe the historical development of the City's governance system. Through embedded analysis, I was also able to combine artefacts with my narratives of the daily experiences of the office to generate field notes that later became data for analysis.

4.5.2 Transcribing

According to Creswell and Poth (2018), transcription is a necessary process intended to prepare data into transcripts from which themes are extracted using a coding process before writing up. Given the number of voice recordings that came out of the research, it was not possible within the research timeframe to transcribe all of them myself, and I engaged the services of a professional transcriber. Some recordings were very busy, involving heated discussions and the use of vernacular language and interjections. Revising these transcripts was a necessary and rewarding process but was very time-consuming. After this long process of verification, all the transcripts were ready for a formal coding process. As shown in Table 14 in Appendix 2, more than 50 hours of recordings were transcribed.

4.5.3 Coding

Coding was the key strategy for analysing data and identifying concrete themes, and this process involved several iterations in order to identify succinct themes. However, I kept my research purposes in mind thus avoiding unnecessary coding. I also opted for a

manual coding process. This was a critical stage of my research, and I wanted to make sure I got the process right (Huberman and Miles, 1994; Bernard et al., 2017). I performed a line-by-line coding of my transcripts and field notes and extracted key concepts, which I then used to form themes. I then reflected on the codes to explain the empirical findings as recommended by Corbin and Strauss (2015).

Coding reduced the experiences of the officials into words, generating qualitative data for an analysis narrative. Following Miles and Huberman's (1994) suggestion, I adopted several strategies for dealing with these complexities. This included taking notes while reading the transcripts and linking my reflections to the literature. On the other hand, as I read the literature, I also made notes that connected the literature with my findings. As suggested by Miles and Huberman, I wrote notes on the margins of transcripts, journal articles, documents or other literature and highlighted parts of the text. These strategies made it easier to generate reflections on the material that I read and to identify or create metaphors used in the narratives and titles of some of the thesis chapters. This process of working with words is highly recommended by Miles and Huberman (1994). I used thematic analysis during the coding process, and the advantage is that it is not tied to a particular epistemological or theoretical perspective and can be used flexibly (Braun and Clarke, 2006). Not all the collected material was analysed given the sheer volume and degree of saturation attained. The material that made it into the final analysis needed to be supported by the data collected from various sources.

4.6 Conclusion

In this chapter, I showed how I went about conducting my fieldwork. I described how I chose my case study, research site, and the methods I used to collect data. The overarching research design was qualitative, and I explained what guided the choices I made during fieldwork. I described at length why I chose ethnography as the methodology I needed to study behaviours, cultures, norms and practices in the governance of water in the City of Johannesburg. I argue here that in order to provide the best interpretation of the phenomenon under study, cut through the maze of bureaucracy, and discover the formal and informal workings, and untangle contradictions and complexities, one needs

to get involved and this is what ethnography offers (Bierschenk and Olivier de Sardan, 2019; Munoz, 2018). I have also shown that my data collection was not structured, and that different methods were deployed as the occasion called. Data came from multiple sources that were not necessarily scheduled, but I had a clear idea of what to look for and the types of data I needed. Analysing the data was a continuous process, and I did not have to wait to complete fieldwork to start the analysis.

5 INSTITUTIONAL REFORM IN THE CITY OF JOHANNESBURG 2000-2016

5.1 Introduction

This chapter gives an account of the service delivery and institutional reforms in Johannesburg in the post-apartheid period, focusing on water services. The reforms were not isolated events unique to Johannesburg but were part of a nationwide dismantling of the apartheid system and building a democratic society. Both national and local history played a role in shaping the institutional form of service delivery arrangements that emerged in the City of Johannesburg by 2000 (Pieterse, 2019). This chapter will show that the institutional makeup of the City of Johannesburg as it currently exists was a product of many years of continuous reform, amendments, and refinements. The City's planning documents, reports and reviews show that the City's administrative structure underwent various changes and adjustments during each successive electoral term since 2000. Through these changes, the City hoped to find a suitable structure that would ensure operational efficiency and effectiveness, meet service delivery objectives, and achieve its aspirational goal of a 'world-class African city' (CoJ, 2002, 2012; Magdhal, 2012; Espoto, 2018). The chapter traces institutional changes in the City since 2000 and explores the governance tensions and paradoxes that emerged. In particular, the chapter shows how these changes shaped the City's role as a regulator of water services in Johannesburg and partly answers the main research question of who governs water services in the City. The chapter does so by providing a detailed analysis of the context within which City officials worked, their challenges, and what sort of norms and practices they used to ensure that water services are adequately monitored and regulated.

5.2 Local Government reform in South Africa

In looking at water services monitoring and regulation in the City, an important starting point is the nationwide institutional changes in South Africa as part of the transition from apartheid to democracy. We have seen that the Constitution of South Africa was the central document that guided this transition and placed the mandate for service delivery on local spheres of government. Given the degree of fragmentation that existed during apartheid where settlements and service provision was divided along racial lines, the local government sphere faced enormous challenges in terms of service delivery, institutional

reforms and building institutions necessary for ensuring that services are delivered efficiently and equitably for the benefit of all citizens (Harrison, 2006). As a result, several developments took place at the national level that pertained to local government and further developments at the City level.

5.2.1 The White Paper on Local Government

The White Paper on Local Government of 1998, the Municipal Systems Act, 32 of 2000 and the Municipal Finance Management Act 56 of 2003, The 1998 White Paper on Local Government was a policy document that guided planning at the local municipal level (RSA, 1998). Drawing mainly on New Public Management principles, the White Paper called for accountability, performance management, goal-directed budgeting, and the introduction of corporate culture to public sector management (Harrison, 2001; Harrison, 2006). The primary planning document for local government, the Integrated Development Plan, also reflected the ethos of NPM. The work of local government was divided into work packages, and indicators were set to measure performance and achievement towards goals (Harrison, 2001). Some surmised that the White Paper caused the local government sphere to be rule-bound and narrowly focused on expenditure while insulating municipalities from public accountability and monitoring (Harrison, 2006; Palmer et al., 2017).

5.2.2 The National treasury department

National Treasury is a department of the South African government whose primary focus is managing government finances (treasury.gov.za). National Treasury has a mandate that flows from the constitution to ensure transparency, accountability and sound financial controls in managing public finances (RSA, 1996; treasury.gov.za). In order to achieve this objective National Treasury uses a set of practices that influence how municipalities ought to manage finances. First, City Managers were assigned the role of accounting officers in municipalities, creating single points of accountability at the local level. The National Treasury requires a City Manager to regularly report compliance with budgets and service delivery targets listed in the IDP. In addition, it is the City Manager's responsibility to publish and submit an annual report on finances, failure of which the municipality risks losing its municipal grant from the National Treasury. Part of the

municipal finance in South Africa comes from a grant received from the national government through National Treasury. If a municipality does not comply with treasury regulations, the grant is withheld - as one official described:

> Here we're tracking the SDBIP and report that to National Treasury every quarter. So this report goes to the internal processes here, City Manager, executives, the mayor, Council and then it goes to National Treasury and when National Treasury is happy, they release the grant (Interview: R12, 2017, Monitoring and Evaluation, GSPCR).

In order to standardise reporting by municipalities, the National Treasury has developed a set of templates for reporting purposes. In 2011, National Treasury published a Performance Information Handbook which 'provides descriptions of approaches and tools that national and provincial departments, public entities and constitutional institutions can use to implement the Programme Performance Information' (RSA, 2011) developed by the National Treasury and outlined in Chapter 5 of the Treasury Regulations. As early as July 2000, National Treasury developed a reporting guideline document titled, 'Mid-Year Management Monitoring and Reporting'. The document focused on performance against budget and service delivery plans and alerted managers where remedial action was required (RSA, 2000). A budget-reporting checklist plus budget compliance were required from municipalities. Figure 6 below is an extract of the Treasury website dealing with municipal finance. At the same time, there was a list of 113 circulars, and some were highlighted as new.

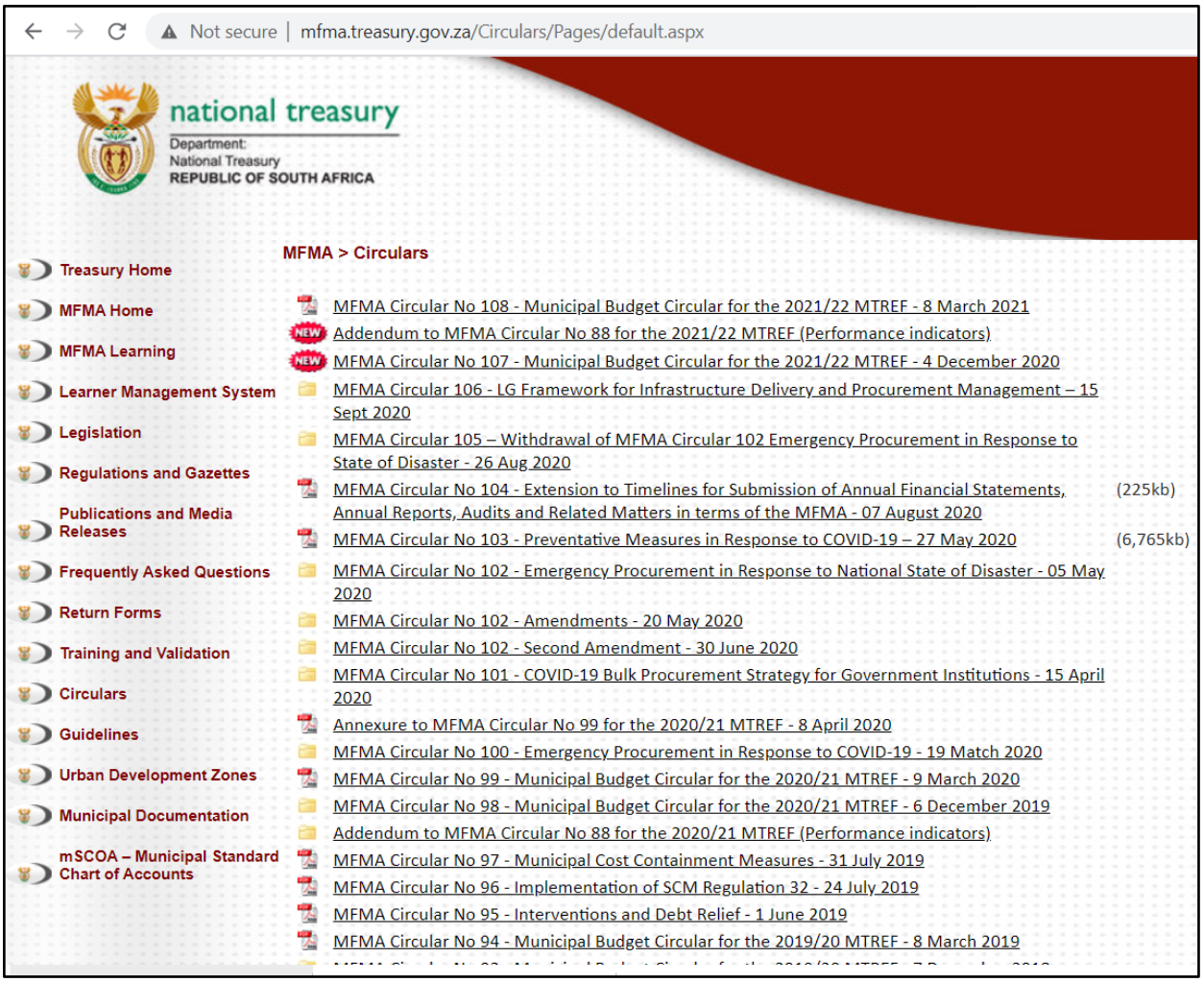


Figure 6: List of National Treasury circular documents to municipalities
Source: National Treasury (2020)

The Standard Operation Procedures (SOP) templates assist designated employees effectively and efficiently in following best practices by performing their tasks correctly and timeously. Regarding JW and water services, these standards are translated to JW through the Service Delivery Agreement and monitored through the City's Group Governance unit. National Treasury thus has the objective of improving management systems and ensuring compliance in the public service (Interview: R6, 2017, ex-advisor to the mayor); a phenomenon known as governing at a distance (Hibou, 2015).

5.2.3 Municipal Systems Act and the Municipal Finance Management Act

The Local Government Municipal Systems Act 32 of 2000 was a direct product of the White Paper on Local Government. The Act assigned functions and powers to municipalities, provided for the submission of annual performance reports by municipalities, and provided for the establishment of municipal entities (RSA, 2000). The System Act made it mandatory for local municipalities to formulate IDPs (RSA, 2004; Swilling, 2008). In addition, the Act was the main instrument for introducing internal performance management, for monitoring and evaluation practices within local government, and was primarily coordinated by national government to which municipalities needed to report on a regular basis (Palmer et al., 2017). Given its emphasis on compliance, the System Act together with the Municipal Finance Management Act 56 (MFMA) of 2003, led to bureaucratisation at local government. For example, in their analysis of South Africa's local government, Palmer et al. (2017) note that in the last 20 years there has been a proliferation in reporting required of municipalities, amounting to 2572 individual data elements. However, this national system of reporting faced challenges. Firstly, the performance indicators were poorly defined, outdated, and gazetted in 2001, and they were not sufficient to cover all aspects of local government service delivery. Secondly, the Act set up two systems that were not in harmony with each other. A decentralised municipal performance management system was linked to the IDP and included in employee contracts and in the national system for reporting on municipal performance (Palmer et al. 2017:87)

The Systems Act and MFMA collectively require that municipal accounts and performance reports be audited both internally and externally by the Auditor General. The government treats audit reports as very important because other regulatory systems fail to obtain verifiable and comparative data on service delivery results and outcomes (Palmer et al., 2017). Local government faced political interference in bureaucratic appointments. As a result, the amendment to the Systems Act in 2010 was explicitly designed to depoliticise municipal bureaucratic administration and to ensure that both provincial and local governments appoint appropriately skilled people rather than make

political appointments (van Vuuren, 2011). Other political office bearers were forbidden to take appointments as senior municipal officials (*ibid*).

5.2.4 Challenges of institutional change in South Africa

As discussed in Chapter 4, the institutional transition in Johannesburg was not an isolated event. It was part of a general transition from the apartheid regime to a new democratic and non-racial state following the first democratic elections in 1994. During this early period, there was a strong emphasis on setting up a legislative framework that would deracialise government structures and foster inclusive development. For local government, a major piece of legislation was the White Paper on Local Government, published in 1998. The White Paper on Local Government contained information on how municipalities were to staff, plan and implement their programmes. It was through this White Paper that integrated development plans were introduced and declared mandatory for all South African municipalities (Ministry for Provincial Affairs and Constitutional Development, 1998).

The Integrated Development Plan (IDP) is a document that municipalities are obliged to publish in which they outline all their planning and budgeting. Municipalities consult with the public on issues regarding developmental priorities, and these are consolidated, prioritised and compiled to become the IDP document. Through the IDP the municipality sets a clear vision, mission and values, formulates appropriate strategies, and an appropriate organisational structure and systems to realise its vision and mission, and aligns these plans to the budget. Planning at the municipal level faces many challenges. These challenges emanate from the nature of local government in South Africa.

5.2.5 Challenges for local government

Four main challenges affected planning at the local government level. First, local government transition efforts by the national government resulted in confusion, duplication of roles, complex bureaucratic systems, and poor financial administration within municipalities (PDG, 2002). As the Palmer Development Group (PDG) noted:

> It has taken policymakers a decade to realise that institutions are not machines that a new organogram can reprogram – they have a momentum of their own and performance is directly dependent on institutional coherence, operational certainty and the perpetuation of institutional memories (p.8).

Several authors note that changing the institutional structures proposed for local government, though necessary, was not sufficient to solve the many challenges that local governments were facing at the time (PDG, 2002; van Donk et al., 2006; Schmidt, 2008).

The second challenge is that there was a capacity problem at the local level to manage change. Local government politicians lacked the experience to oversee the bureaucracy, let alone manage the complex policy imperatives associated with holistic development ambitions (van Donk et al., 2006). The silo-based structure that most municipalities inherited and perpetuated rendered inter-departmental cooperation difficult (*ibid*). The third is that both the White Paper on Local Government and Integrated Development Planning placed a strong emphasis on performance management in line with New Public Management principles (Schmidt, 2008; Harrison, 2001). For example, in 2006 the National Strategic Agenda for Local Government set national targets to inform municipal targets and performance contracts of municipal managers and senior managers (van Donk et al., 2006). A national monitoring and evaluation system followed, and local municipalities had to adopt it (*ibid*). This resulted in a reporting burden for municipalities. Lastly, the decentralisation of responsibilities to municipalities, which intended to devolve decision-making to the local level and increase accountability, was difficult to operationalise because policies were contradictory and highly contested among different stakeholders. Consequently, the core objectives of service delivery, namely equity and sustainability were compromised.

5.2.6 Challenges for the water sector

The general challenges faced by local government generally had particular implications for the various service sectors, including water services. The national government realised that the inequalities in access to water services that existed before 1994 needed to be remedied. Through the constitution, access to sufficient water was listed as a right under the Bill of Rights (RSA, 1996). This followed a recommendation made in the 1994

White Paper on Water Supply Sanitation with additional guidelines introduced later through Strategic Framework for Water Services in 2003 (DWAF, 2013). However, the guiding principles informing water policy contained contradictory policy rationales that were not easily reconcilable. Firstly, to address the inequalities of the past the government needed to invest heavily in water services infrastructure in poor and historically disadvantaged areas (Smith and Morris, 2008). Secondly, the adoption of GEAR by the national government required that municipalities be self-financing hence causing water policies at local level to be based on the principle of cost recovery (CALS, 2008; Furlong and Bakker, 2010). These tensions, coupled with weak state capacity and a fragmented water sector, meant that inequalities in the provision of water and sanitation services were generally perpetuated (Bischoff-Mattson et al., 2020). Unresponsive and path-dependent organisational cultures also made it challenging to deliver services efficiently and effectively (Nzewi, 2016).

The three policies designed to cater for the poor, namely (i) Increase Block Tariff (IBT), (ii) Free Basic Water (FBW), and (iii) the Municipal Indigent Policy, have either been contested, not universally applied or withdrawn altogether as in the case in FBW in the City of Johannesburg during the fourth electoral term (CoJ, 2017). The choice between equity and efficiency was particularly contested in the City of Johannesburg through the Mazibuko Court case on prepayment of water meters and Operation G'cina Manzi, which was part of the infrastructure upgrade in Soweto Township.

5.3 Developments at the City level

The adoption of a non-racial constitution in 1996 also set in motion a series of administrative changes at the local level.

5.3.1 Amalgamation

Before 1994 Johannesburg was a loose collection of 13 independent and racially-based local municipalities (Allan et al., 2001; CoJ, 2006). Through amalgamation, these were reduced to five under a two-tier local government system comprising a single upper-tier performing oversight, and four sub councils that were responsible for the implementation

of programmes and projects (CoJ, 2006). The two tiers collectively formed the Greater Johannesburg Metropolitan Council (GJMC), elected in the first democratic local elections in 1995. Its principal mandate was to reverse the legacy of apartheid (*ibid*). Although the new structure of one metropolitan Council with four substructures was an improvement from the previous 13 separate municipal authorities, the entire administration remained highly fragmented, complex, inefficient, unfocused, and lacked management skills (PDG, 2002; Allan et al., 2001).

5.3.2 Financial crisis and the solution

Since the legal framework was very loose, the City administration suffered uncontrolled expenditure and loss of accountability. Eventually, the City fell into a severe financial crisis in 1997 (Seedat, 2001; Alan et al., 2001; PDG, 2002; CoJ, 2006; Smith, 2006). In order to deal with this crisis, the GMJC came up with a plan known as iGoli 2002. IGoli 2002 was a bold plan that radically transformed the City's overall governance structure and proposed fundamental changes to service delivery in the City, including water (Alan et al., 2001; Schmitz, 2006; CoJ, 2006). The sub-optimal performance of Johannesburg under the two-tier model greatly influenced the thinking at the national government level such that the national government decided on a single-city administration for large metropolitan areas like Johannesburg (van Donk et al., 2006).

5.3.3 The 2000 local government elections and restructuring in Johannesburg

After the local government elections in 2000, the unified City of Johannesburg came into existence as a single administration. The proposal to restructure service delivery in terms of the iGoli Plan resulted in the creation of a water services utility company called Johannesburg Water Pvt Limited alongside other utilities such as Pikitup for waste removal and City Power for electricity. However, this was just one of the many options available for restructuring service delivery at the time. Privatisation was also an option undertaken for other services in the City. The City created corporations and agencies including Metrobus, Johannesburg Market, City Parks and Zoo, Johannesburg Housing Corporation. The formation of utilities was explicitly designed to ring-fence these newly formed companies and to ensure that they operate efficiently to raise enough revenue for the City to finance other service non-revenue generating areas.

5.4 The relationship between the City and the Water Company

In terms of the iGoli 2002 Plan, Johannesburg Water was a wholly-owned, arms-length, corporatised entity (Allan et al., 2001; Seedat, 2001; CoJ, 2006; Smith, 2006). The entity was to operate and maintain both water and sanitation infrastructures, increase efficiency, improve service delivery, and maintain the City's financial stability by regularly generating optimal revenue (Ruiters and Matji, 2016; Magdhal, 2012; PDG, 2002; Allan et al., 2001).

5.4.1 The contract-client split and the principal-agent problem

The relationship between the City and its water company was based on a central NPM feature known as a client-contractor relationship model designed to create a more precise division of responsibility, thereby making performance-based management and measurement possible (CoJ, 2000, CoJ 2001, CoJ, 2006). This model was a compromise that avoided outright privatisation and allowed the state and politicians to retain control and ownership in terms of the strategic objectives of service delivery (Smith 2006; Magdhal, 2012; Herrera and Post, 2014). However, the political sensitivities and tensions surrounding the formation of Johannesburg Water were not easily resolvable. For example, advocates of corporatisation argued that the utility was virtually a public entity because the City was the sole shareholder. It appointed the board of directors of Johannesburg Water and set service targets (Magdhal, 2012; Schmitz, 2006). Other critics argued that the status of JW as a private company prioritised cost recovery and economic accountability while ignoring the social objectives of equity (Smith, 2006; Hansen, 2005; PDG, 2002).

5.4.2 Equity-efficiency dilemma

In Johannesburg, debates on water services were centred on issues of equity, efficiency and financial sustainability (Schmitz, 2006). The JW model was in line with the neoliberal ideological position that the national government adopted in 1996 through the GEAR programme (Hansen, 2005). The tension between equity and economic efficiency in Johannesburg however led to a shift from the struggle against apartheid to a fight against corporatisation and privatisation by specific constituencies opposed to neoliberalism, such as the workers' unions and civic organisations (Hansen, 2005; von Schnitzler, 2014). Smith (2006) identified several tensions associated with this Johannesburg Water model

of corporatisation. First, there was tension between the City's goals of generating surplus revenue and extending services to previously disadvantaged areas. Second, the dual identity of the local authorities of both regulators and shareholders meant that there were conflicts of interest.

The City intended to instil private sector values of efficiency and cost recovery while providing low-cost services to the poor. Third, utilities like JW did not consider themselves directly accountable for meeting the service delivery needs to communities. Instead, their priorities rested on generating revenue for the City (Smith and Morris, 2008). Lastly, the boards of directors of the entities either misunderstood or narrowly interpreted City objectives to the extent that the pro-poor agenda was side-lined.

The City attempted to ensure that Johannesburg Water was accountable through regulation and the sharing of data to identify gains and gaps. Officials argued that the instruments for holding the utilities to account were very loose and lacked real teeth to bring the utilities under check (Eales, 2006). Failure to have complete control of the entities was one reason why former Johannesburg mayor Herman Mashaba tried to reintegrate the entities back into the City. He argued that the utilities paid more attention to the boards of directors than to the City (Mashaba, 2016).

5.4.3 The Contracts Management Unit

In 2002, the City set up a Contracts Management Unit (CMU) to perform the regulatory function over the City's 14 corporatised entities that existed at the time, including Johannesburg Water (PDG, 2002; Smith, 2006). The aim was to improve the management and accountability of the different entities and to manage the different contracts the City had with the entities. The CMU monitored the water utility and ensured the transformation of the water service delivery objectives into a series of performance indicators and service targets (CoJ, 2006; Schmitz, 2006; Smith, 2006). The CMU was a small unit with only a handful of staff and had a certain degree of autonomy to perform the oversight function over all the City's entities (Smith, 2006; CoJ, 2006). The Unit was strategically housed in the City Manager's office, as shown in Figure 7 below.

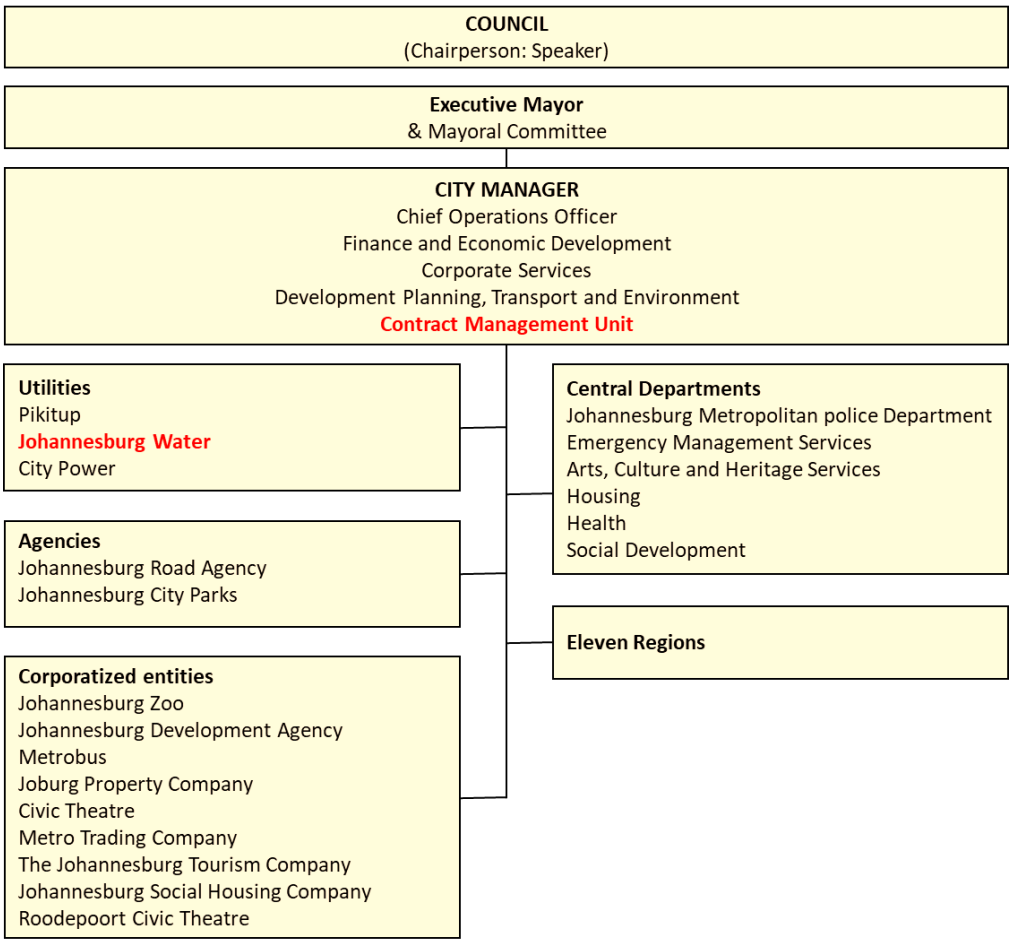


Figure 7: Structure of the City of Johannesburg in the 2000s
Source, CoJ, 2006

Although the CMU was responsible for overseeing the work of all the 14 companies, it was ill-equipped to perform the task. For example, the staff complement of between two and three people did not have enough muscle to perform this function. Schmitz (2006) suggests that the creation of the CMU was an afterthought, after realising that there was no explicit policy, persons or departments tasked with overseeing the entities after they were created. This quote from Schmitz sums it up:

> When we established all these companies, which was in the year 2000-2001… […].. Someone said 'hey how are we going to oversee the performance of these entities, so it was a bit late in the day that they realised that we need to establish a contract management unit […] and it was established with a very rudimentary structure and functionality – when I say rudimentary functionality I mean that suddenly two or three people had to grasp what the role of this Unit was all about, so what they did was, they

> absorbed anything and everything that had to do with these companies into the Unit (City official quoted in Schmitz, 2006, p.127).

Smith (2006) also argues that City did not initially attribute sufficient importance to the magnitude of work required to oversee 14 companies and thought that the City had inherent power under the ownership and could therefore sufficiently oversee these entities. The absence of legislation relating to municipal entities added to the problem. The Municipal Finance Management Act (MFMA) of 2003 and the Municipal Systems Act (MSA) of 2000 were not yet promulgated, thus creating a policy gap. It was to address this policy gap and ensure the exercise of political oversight over the newly established companies that the City set up the CMU in 2002 (Smith and Morris, 2008). In the first five years (from April 2001 to June 2006), the City appointed the Johannesburg Water Management Company (JOWAM) to set up a water utility and place it on a sound financial footing. JOWAM was a joint venture company between the Suez Group of France and its two subsidiaries, the UK-based Northumbrian Water and Water and Sanitation Services South Africa (WSSA) (Schmitz, 2006; SALGA, 2011). JOWAM was appointed under a five-year management contract to assist JW with its operations. This arrangement resulted in a split of responsibilities between the then GJMC, the Board of JW and the City. GJMC was responsible for investment funding, the Board of JW was accountable to the City in terms of the provisions of the Service Delivery Agreement (SDA), and JOWAM was responsible for the day-to-day management and functioning of JW (Salga, 2011). JOWAM was paid a fixed management fee of R25 million spread equally over the five years and an additional incentive-based payment linked to performance (*ibid*).

Figure 8 below shows the contractual agreements between the three institutions, namely the City, Johannesburg Water and JOWAM.

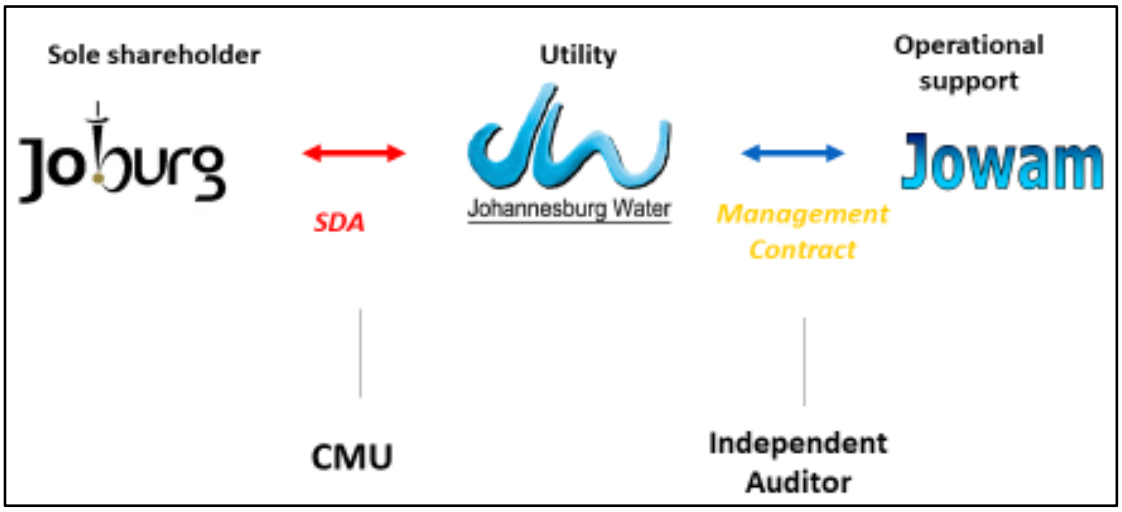


Figure 8: Contractual agreements: 2001-2006
Source: Eales (2006)

In this initial phase, the CMU monitored the utility's compliance with the SDA while JOWAM's management contract covered the performance of JW. According to Eales (2006), an independent auditor was appointed to monitor JOWAM's performance and advise the Board of Directors on setting annual performance targets.

5.4.4 The paradoxes that confronted the CMU

The CMU faced several challenges in its efforts to monitor the performance of JW as a company and in reporting on the service delivery performance and levels of service. First, The CMU was created in haste and there was initially a lack of clarity about its identity and role. As Schmitz (2006) writes, the City expected the CMU to play a pivotal role in the restructuring process. However, at the same time, it was burdened with a multiplicity of tasks related to the implementation and collection of data for monitoring purposes. Due to work overload, the monitoring and oversight aspects were neglected as the CMU found itself facilitating and embarking upon a range of institution-building measures rather than managing contracts (Schmitz, 2006; Smith, 2006).

The CMU faced tensions related to achieving greater efficiency in the water sector and extending services to previously disadvantaged groups. This tension limited the autonomy of the utility and the authority of the regulator, as Smith (2006:p. 11) writes:

> With respect to autonomy, Johannesburg Water was set up under the Companies Act to "run like a business" with its own board of directors. As the sole shareholder, the City appoints—through the SHU—the board of directors and the managing director of the company. While the board is ultimately responsible for overseeing the operations of its company to ensure that it is commercially viable, it must also ensure that the company adheres to the City's policies. These policies are constantly "in the making" and present new challenges to the board in terms of interpreting how to implement such policies within the best interests of the company (Smith, 2006:11)

The tensions emerged from a set of three paradoxes that affected Johannesburg Water as a utility (Smith, 2006; CoJ, 2006). The first paradox is that the utility was operating independently from the City, and yet the utility was to be responsive to the Council. The second was that the utility was to be financially ring-fenced but was also about to enter into financial relations with the City, and the third, the City was to be simultaneously a shareholder and manager, keen to maximise the independence of the utility, but it also formulated restrictive conditions under which the utility had to perform (Schmitz, 2006: 129). These tensions were not unique to JW but were typical of the corporatisation of water across the world, as discussed in Chapter 4.

Officials in the CMU also experienced bottlenecks resulting from the fragmented nature of the City administration. A former director of CMU argued that they experienced a locational disadvantage and that the work environment was highly politicised with too many protocols. In addition, the unit lacked access to crucial information on strategic developments in the City due to information access hierarchies. As the former director of the CMU argued, the CMU had no authority to perform its job (Eales, 2006).

The CMU also faces issues related to other sectors, making it difficult to force Johannesburg Water to fulfil its mandate. For example, water services follow housing developments, determining the level of service regardless of affordability or City policy. In some cases, Johannesburg Water cannot plan service upgrades without the knowledge of where the Department of Housing (which is national and provincial competency) is planning to build houses, and the utility cannot service informal settlements on private land unless the municipal housing department has received agreement from landowners. Other interdependencies include power cuts and bad roads

that limit access to service vehicles (Eales, undated). Despite all these challenges, Johannesburg Water was hailed by the international community as a successful model of corporatisation (Ruiters and Matji, 2016).

5.4.5 The Shareholder Unit (SHU) and tension resolution

The City was aware of the need to minimise the conflict of interests arising from being both a shareholder interested in profit maximisation and dividends and being the client seeking increased levels of service and improved service standards at a reasonable cost (Smith and Morris, 2008). According to Smith (2006), the City found it difficult to reconcile these seemingly divergent interests through a single unit and needed to draw a clear line between being both the regulator and the client. The task of the SHU was to represent the City's shareholder interests in each of the entities and to ensure sound governance and the fulfilment of shareholder compacts, i.e. agreements between the City and the entity's board of directors, and then reporting to the City on the entity's performance and other shareholder-related issues (CoJ, 2007). Following an institutional review in 2006, the SHU was moved from the CMU to the Department of Finance and Economic Development (CoJ, 2006; Smith, 2006). This move led to an expansion of the City's administration rather than a lean bureaucracy; a phenomenon observed in each of the successive administrations of the City since 2000.

5.4.6 Service Delivery Agreements

In South Africa, when an external agent provides municipal services, the party enters into a service delivery agreement (SDA) (du Plessis, 2003). In this case, the City of Johannesburg was the Water Services Authority (WSA) and JW was the Water Services Provider (WSP). As the WSA, the City held JW accountable through the SDA. The SDA specifies and assigns responsibilities for both the WSA, the City and the WSP, i.e. JW. These responsibilities are stipulated in Section 81 of the Municipal Systems Act 32 of 2000. The Act specifies that, while an external mechanism may provide services, it should, according to the municipality's IDP and the SDA, contain a performance measurement system with targets to be achieved as per the IDP (RSA, 2000).

Further, the Act stipulates that services be rendered in priority areas and the levels of services be specified to avoid interruptions in supply. The onus of how services should be rendered falls on the municipality, given its status as the water services authority. The municipality then transfers these responsibilities to the water services provider through the SDA (du Plessis 2003). Aspects covered in the SDA include the development of a detailed service delivery plan within the framework of the municipality's IDP, operational planning and management of service provision, customer care management, and financial management and reporting.

The SDA is not unique to water but applies to all services provided by an external agent. In the case of Johannesburg, the City has SDAs with Pikitup, City Power, and all its other agencies. The SDA is a standardised document that is applied uniformly across all City agencies in terms of their responsibilities and obligations. The only variation is on the service rendered.

5.4.7 SDA content of deliveries expected of JW by City

The primary task of Johannesburg Water, a municipally owned entity formed in 2001, is to provide water services to residents of Johannesburg on behalf of the City (Allan et al, 2001), following the policy directions inscribed in its strategic documents such as universal and uninterrupted access to water and sanitation services. JW is 'locked' into the water service network by means of a Service Delivery Agreement, a legal document binding the MoE to deliver services on behalf of the City. In terms of ANT, the SDA acts as an 'intermediary', in the form of text inscribed on paper transporting meaning and force to the entity and prescribing how it should act. The SDA between the City and Joburg Water stipulates that Joburg Water will provide water in accordance with City strategies:



Figure 9: The SDA between the City and JW
Source: CoJ Internal documents

The signatory to the SDA in the City is the Group Head of the Group Governance unit. As seen in Figure 9, there are no quantitative items listed as part of what is expected of JW by the City. This document is simply a legal document to hold JW accountable in the event that it does not delivery on the City's mandate. However, it is not clear how this work when the actual deliverables are not specified legally. An ANT reading shows that the absence of quantitative targets renders the SDA very weak as an instrument of governance. The content only sets the legal parameters of monitoring JW whereas the tensions between cost recovery and equity are not cleared framed. A further discussion on SDAs is given in Chapter 7.

5.5 Administrative changes in Johannesburg since 2000

Given the foregoing challenges coupled with the need to find a workable administrative structure, the City persistently implemented changes, made modifications, and kept refining its institutional structure since 2000. These administrative changes, which took place during the first three electoral terms between 2000 and 2016, are examined. Particular attention is paid to what the implications were for the water services governance in the City. According to the City's planning documents, the governance structure underwent repeated modifications and refinements, which led to fundamental changes (CoJ, 2011; CoJ, 2006). An overarching explanation given by the City was that local government legislation in post-1994 South Africa was new. In particular, the

proposals made in various acts, namely the Municipal Systems Act 32 of 2000 and the Municipal Structures Act 117 of 1998, were only theoretical and had not been tested out. Through the implementation of these acts, the City found out what they intended and how their intentions played out in practice (CoJ, 2006). The City had to work within the confines of the law to develop a structure for the City to suit its circumstances, which involved trial and error (CoJ, 2006).

5.5.1 The first electoral term (2000-2006)

Following the elections in December of 2000, the City of Johannesburg Metropolitan Municipality was born. Amos Masondo became the first executive mayor of this new municipality. The new City displayed racial segregation and inequalities in service delivery and the new administration set up bold objectives for taking the City into the future according to democratic principles. The administration set three main goals to achieve during its first electoral term. First, it needed to lay the foundations of a newly unified city based on the Municipal Structures Act of 1998. This meant that the old two-tier administration system had to be dismantled and a new single-tier administration instituted. Second, the City needed to complete the restructuring process as proposed under the iGoli 2002 Plan. This process was designed to eliminate the dysfunctional institutional arrangements which contributed to the financial crisis in 1997. Third, the City needed to prepare the way for the installation of a new executive Mayor who, together with an appointed Mayoral Committee, was to have full executive authority to make crucial decisions for the City (CoJ, 2006:22). This process meant that the mayor was to have considerable influence on how the City set its priorities regarding services delivery, as discussed in later chapters.

On coming into the office, Mayor Masondo advocated a cabinet type model of administration for the City's top structure. A ten-member mayoral committee, known as Members of the Mayoral Committee (MMCs), was appointed to also operate in a similar way as Members of Executive Councils (MECs) at the provincial level. This meant that regardless of them being politicians, the MMCs had complete control over and oversight of their respective portfolios (CoJ, 2006). When this proposal was approved, the City was

the only metro to have such an administrative model. The idea was to introduce more executive accountability by separating executive and legislature functions more formally (*ibid*).

By the time of the 2000 local government elections, the City had already implemented many of the proposals of the iGoli Plan. The major task of the new administration was therefore to either rethink or formalise its governance model in ways that suited the City's unique institutional and financial circumstances (*ibid*). A major development during this time was the finalisation of the municipal entities model proposed under the iGoli Plan. These entities were financially ring-fenced and given institutional autonomy, meaning that they operated at arm's length and kept their own accounts (;; Allan et al., 2001; Seedat, 2001; Smith, 2006). According to Smith (2006:8), the City hoped to "better integrate the historically separate functions of accountants and engineers by bringing together financial planning and management, and service infrastructure planning and management into the same business process".

The idea was to separate policy development from implementation. In so doing, service delivery managers in the entities were given complete control over the implementation of service delivery and cost recovery, while the City's core administration was tasked with developing policies and setting service standards (Savage et al., 2003 cited in Smith, 2006; Smith, 2006;; CoJ, 2006). Through this model, the City envisaged that the new utilities, agencies and corporations, (UACs) would dramatically improve service delivery efficiency and achieve financial stability for the City (CoJ, 2006). The City's Council comprised chiefly of elected officials, was to act as the overseeing body. The Council thus retained all regulatory and oversight functions which included monitoring companies against performance targets, setting tariffs, and leaving all other operational issues to the utility (PDG, 2002; CoJ, 2006). During this early period, the actual work of monitoring the entities was performed by CMU, which would then report to the Council through the MMC. The CMU was an important institutional innovation of the new City administration (CoJ, 2006).

5.5.2 The second electoral term (2006-2011)

As the single metro municipality became operational, the City gradually underwent a level of transformation. In order to deal with the developmental imperatives, the City needed a more dynamic, flexible, and robust administrative structure. Consequently, it was obliged to undertake several restructuring exercises to meet the demands and become financially stable (CoJ, 2006; Van Donk et al., 2006). In 2006 a new Council was elected, and Masondo was re-elected as mayor for another term. This development allowed the City administration to review its structure, examine its strengths and weaknesses, and seek ways to improve it. Hence, the City undertook a refinement of its institutional model following the 2006 local government elections to enhance policy development and monitoring, streamline core administration, and ensure clarity of responsibility (CoJ, 2008; CoJ, 2011). Administratively, the second electoral term was marked by adopting a separation of powers principle, the formation of ISD, and a shift from the Section 80 oversight committee to Section 79 committees.

By 2008, a range of new institutions was in place to enhance service delivery, improve the City's financial position, and facilitate stakeholder participation (CoJ, 2008). Since 2000, the City has separated policy determination and implementation; politicians determined policies and the administration was responsible for interpreting and implementing the policies. In this way, the City aimed to enhance its regulatory capacity while increasing accountability and transparency in service delivery based on the principles of New Public Management (CoJ, 2008; Palmer et al., 2017). While the 2000-2006 model was successful, the City noticed overlaps in the executive, legislative and oversight roles occurring in several areas of the City’s administration structures, which led to decision-making bottlenecks while compromising service delivery (CoJ, 2008).

During the second electoral term, the City adopted the separation of powers principle, hence delineating legislature and executive roles. The role of the legislature was focused on legislative oversight, participatory governance, and law-making. This meant that the Council approved by-laws related to service delivery, approved policies and the IDP, set rates and tariffs, and approved the budget (CoJ, 2008). The newly defined role of the

Council gave it increased impetus regarding the oversight function while delegating executive functions to the mayor and his mayoral committee. According to Zollar (2005), the separation of powers principle is of French origin initiated by Montesquieu, an 18th century political philosopher, who sought to prevent the concentration of power in one body of the state through a system of checks and balances. In the case of South Africa, the separation of powers principle rests on protecting these powers by existing laws. However, in practice, separation of powers has been hampered by different branches intruding into each other's offices and compromising governance and democracy at the local level (O'regan, 2005; Chikwema and Wotela, 2016). According to Chikwema and Wotala (2016), both oversight and accountability have been compromised in the City because legislative and executive functions have been conflated. For this reason, and in a bid to achieve trenchancy and public accountability in governance, the City created the Office of the Ombudsman in 2016 to handle residents' complaints (CoJ, 2016a).

The other important change during the second electoral term was the creation of the Infrastructure and Services Department (ISD). This department was set up in 2006 as a command centre for services and associated infrastructures in the City (CoJ, 2008). ISD took over most of the functions that CMU had hitherto performed for the three entities, namely JW, City Power and Pikitup (*ibid*). Unlike the CMU, the department focused on monitoring and guiding company strategies for the three utilities by working closely with them and managing overall demand for and supply of services (CoJ, 2008). Due to the new legislative developments, changing citizens' demands and changing service targets, the City embarked on research to establish the extent of backlogs in the case of water and sanitation in order to inform better the City's Growth and Development Strategy 2040 (GDS), a long term developed by the City (CoJ, 2011).

The primary function of ISD was to translate the development agenda of the executive into a comprehensive infrastructure services plan. The Department needed to craft appropriate policies and strategies and set plausible objectives and goals that were to contribute to achieving the long-term goals stated in the City's GDS. During this term, all the contracting, managing, and regulation of service delivery by the three utilities were

overseen by ISD (CoJ, 2011). The move represented a significant shift from the initial system, where the CMU was responsible for between 13 to 15 entities. ISD focused only on the three entities responsible for water and sanitation, power, and refuse collection.

During this period subcommittees, known as Section 79 Committees were formed along the Municipal Structures Act 117 of 1998. Their main role was that of oversight and to hold the executive, i.e. the MMCs and City officials accountable for the executive decisions regarding planning, spending, and service delivery. This is how it worked: the mayor and the mayoral committee formed the executive arm of the Council and were responsible for the day-to-day decision-making and operational oversight. The executive had to submit quarterly and annual reports to Council. The role of the Section 79 Committees was to scrutinise and examine these reports and make recommendations to the Council (CoJ, 2008). The legislature thus exercised an overseeing role on the executive through these committees. However, in practice, the process did not always follow these channels as discovered during fieldwork. To complement the overseeing role, the Section 79 committee conducted site visits to projects and service delivery sites and raised motions in Council to hold the executive accountable and to initiate debate on critical issues relating to service delivery (CoJ, 2011).

5.5.3 The third mayoral term (2011-2016)

During 2011, another round of local government elections was held, and a new Council was elected. Parks Tau was elected as the new executive mayor. Taking precedence from the previous successive terms, Tau implemented the recommendations of a 2010 institutional review to improve the quality of governance, respond efficiently to community demands and needs, and address problems associated with the previous structure such as the conflation of roles, fragmentation, and duplication of effort (CoJ, 2012). At the time, the City administration consisted of 14 line departments and 15 municipal-owned entities. The City considered the arrangement inefficient and engendering a silo approach to service delivery which was ill-suited to address the City's long-term goals outlined in the GDS 2040 document (CoJ, 2011). The City, in particular the mayor, saw the need for a new institution to break the siloed way in which the City operated (CoJ, 2012).

In November 2010, the City commissioned an evaluation of its institutional design to identify areas for improvement (CoJ, 2012). The outcomes of this evaluation coincided with the start of the third electoral term, a review of the City's long-term plan, the GDS 2040, and the imposition of imperatives by the national and provincial governments through the Local Government Turnaround Strategy (CoJ, 2011; 2016). The City's institutional review identified several challenges that affected the City's ability to function correctly. These included complex administrative arrangements with broad control, fragmentation in the implementation of programmes, tension between departments due to conflation of roles and responsibilities, lack of cooperation between the City and its entities, and lack of clarity regarding roles played by the City regional offices (CoJ, 2016a:36).

The City decided that it needed a new institutional model to address these issues. The aim was to build a more effective, efficient and accountable administration as stated in one of the City's reports:

> The need for clean, accountable, and productive governance processes informed the decision to develop and adopt a new Governance Framework in this term of office, defining the City's relationships with its municipal entities (CoJ, 2016a:31).

Based on this objective, the new 2011 administration of the City embarked on building a model that it considered futuristic and responsive to people's demands in terms of service delivery. The approach of this new model was to align the executive management structure with the GDS 2040 to strengthen accountability, oversight, and corporate governance and enhance service delivery. Concerning the entities, the City's restructuring process was designed to ensure that all legal and compliance requirements were adhered to, strengthening the executive responsibility of management and improving accountability in both decision-making and implementation of policies and programmes (CoJ, 2016a).

5.5.4 Corporate governance and the Group Approach

A major change in the City's administrative structure during this third term was the introduction of the Group System, which was another layer of governance separate from the standard structure of line departments. This move led to the formation of new units called Groups and was to perform what the City called group functions such as Group Finance, Group Governance, and Group Strategy. These were functions that pertained to the entire City administration instead of being individually performed by each department. Through these group functions, the City intended standardised or uniform implementation of City functions such as finance, audit, strategic planning, governance, and marketing (CoJ, 2016a).

The City went ahead and approved the new governance framework involving the functions during the 2014/15 financial year. The framework was not intended to change the organisational structure and delivery model that was already in place but was to assist the City in better coordinating its various administrative functions and to ensure effectiveness and accountability in service delivery. The roles and responsibilities of the units were further clarified and aligned to City policy, consistent performance standards were set up, and channels of communication with the Boards of Directors of the municipal-owned entities were put in place (CoJ, 2016a). According to the City, these changes were intended to provide increased oversight and give unbiased advice to the Council (CoJ, 2012).

In 2011, the Infrastructure Services Department (ISD) was merged with the Environment Department to form the Environment and Infrastructure Services Department (EISD), which was in place during this research. The City found it logical to merge these departments because services such as water, electricity and waste encompassed both an infrastructure component and an environmental component (CoJ, 2011). When the Group Approach was introduced, the City's line departments were reduced from 10 to 9, and the municipal-owned entities were reduced from 15 to 12. According to the City's records, the idea of group function was to ensure alignment and consistency between the City's strategic goals and actual implementation. However, as discussed in later chapters,

this move added more complexity to the City's overall structure, and it increased the number of officials reporting to the City Manager. For example, the head of each Group function was classified under Section 57 of the Municipal Systems Act, 32 of 2000, which meant that they reported to the City Manager. Figure 11 below shows the major facets of the City administration following the implementation of the recommendation of the 2010 institutional review. At the top was the legislature and the Council, then immediately below it was the executive, comprising of the Mayor, the City Manager, Executive Directors of line departments, Heads of the Group Functions, and the managing directors of the entities. The political oversight structures comprised Section 79 portfolio committees and technical clusters, including technical experts. The entities are at the bottom and comprise a board of directors, chief executive officers, managing directors and officials. Line departments and group functions were on the same level as shown in Figure 10 below.

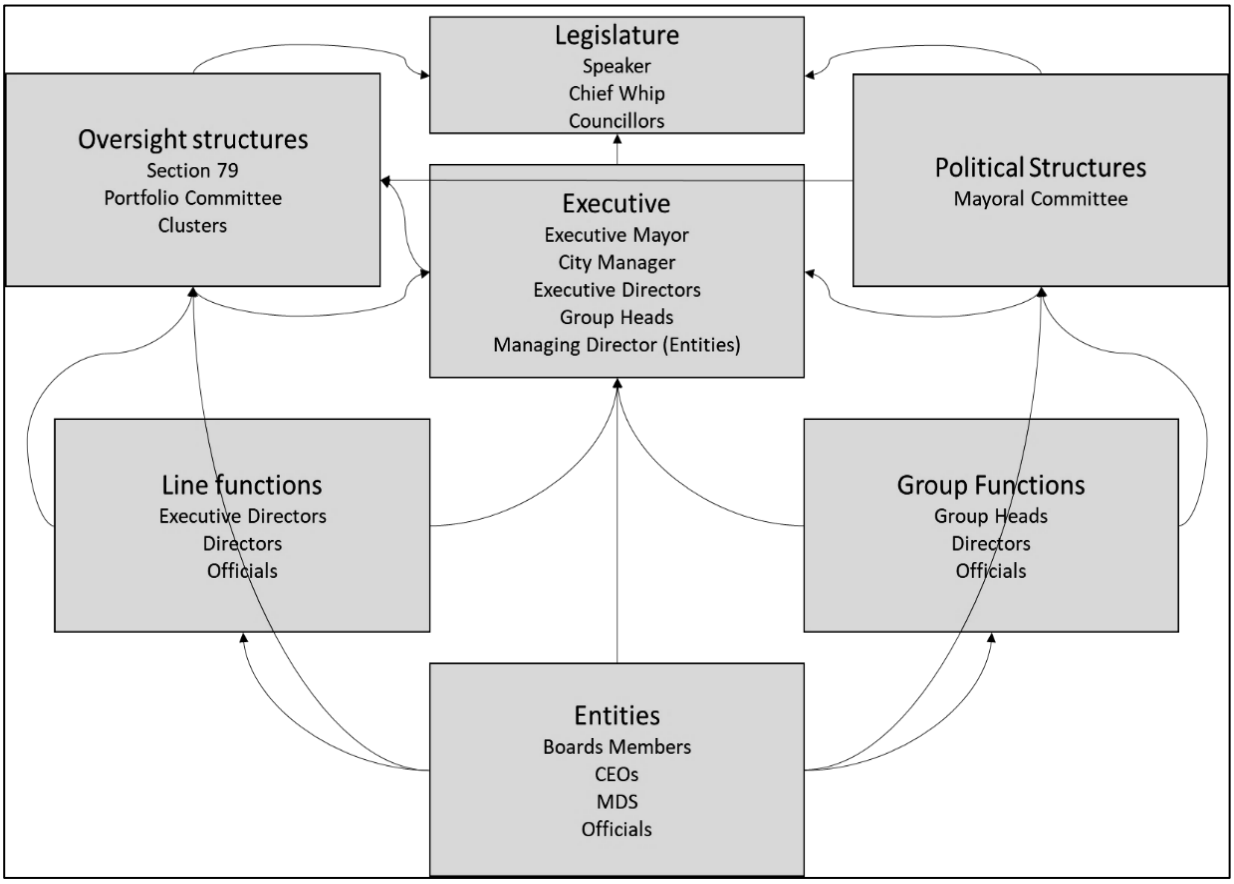


Figure 10: Broad City structure since 2011
Source: Author

By 2012, the City's governance resembled that of the national and provincial governments, comprising executive and legislative functions. The legislative arm constituted the political administration or Council, led by the Speaker, while the executive mayor and the city manager formed the executive arm of the City's administration. The new governance model refined the executive, Council, and administration roles in terms of decision-making accountability, institutional structures, and oversight (CoJ, 2012). The City administration focused on the City's core functions while the municipal entities were responsible for delivering actual service to the people. In implementing these governance changes, the City argued that it responded to calls by stakeholders and communities for improved service delivery (CoJ, 2012).

5.5.5 Cluster Mayoral Subcommittees[10]

An additional structure introduced by the City's third administration was the formation of cluster mayoral subcommittees. These cluster committees were aimed at strengthening governance structures by promoting greater and better coordination among departments. The clusters were not very formal but provided a platform for integrating service delivery packages and achieving greater accountability and oversight by allowing departments to work together (CoJ, 2016a). The idea of cluster committees was not new; they had been used during the previous terms to deal with either cross-cutting programmes and special or time-based programmes such as the FIFA Soccer World Cup of 2010 (CoJ, 2012). This time, the cluster subcommittees were reconfigured to align with priority areas of the GDS 2040 long-term plan. Their role was to assist the Mayoral Committee in fulfilling its executive functions and enhancing decision-making by focusing on technical and strategic issues of projects and programmes (CoJ, 2012). In 2011, the City set up four cluster subcommittees, namely Sustainable Services, Economic Growth, Human and Social Development and Good Governance. Each cluster was allocated a specific focus area. Water services were placed under the Sustainable Services cluster, and a brief outline is given in Table 10 below.

[10] Also known as Service Delivery Mayoral Subcommittees

Table 9: The mandate and composition of the Sustainable Services Committee

Subcommittee	Key Focus Area	MMCs involved	Chairperson
Sustainable services	● Demand-side management (**water**, energy) ● Sustainable human settlements ● Mass public transport and non-motorised transport ● Climate change and resilience ● Waste minimisation ● Informal settlement upgrade	● MMC: Development planning and urban management ● MMC: Infrastructure Services and Environment ● MMC: Housing ● MMC: Transport	MMC: Development Planning and Urban Management

Source: Author based on CoJ, 2016a

The other primary functions of the Mayoral subcommittees were to provide political leadership and guidance for coordinated and integrated service delivery (CoJ, 2016a). Table 11 shows the mandate of these committees as outlined in the City's official documents.

Table 10: The mandate of sub-mayoral committees

- Identify priority multi-sectoral programmes for coordination and integration (Programme of Action Plan)
- Ensure overall coordination and alignment of service delivery between sectors/portfolios within the cluster
- Provide guidance and oversight in the implementation of service delivery programmes
    - Oversee development of business plans for cross-sectoral programmes
    - Oversee the allocation and use of resources for identified programmes
    - Monitor progress and impact of identified programmes
- Advise the mayoral committee on progress with the implementation of service delivery programmes within the respective clusters.
- Serve as a pre-screening mechanism for reports and decisions for deliberation at Mayoral Committee, thus enhancing decision-making and focus on strategic issues by the Mayoral Committee
- Ensure that relevant departments are allowed the opportunity to provide input and comment on reports
- Make recommendations to the Mayoral Committee.

Source: CoJ, 2016a

These committees had no decision-making powers but could make recommendations and advise the Mayoral Committee to make informed decisions.

5.5.6 Outcomes-based approach

Committed to improving residents' lives through accelerated delivery, the City reviewed and finalised the GDS 2040, which it claimed was based on the principle of social inclusion and leaving no one behind (CoJ, 2016a). Recognising the need to measure the outcomes and achieve financial sustainability, the City adopted an outcomes-based approach in 2011 and by the end of the term, the City had received unqualified audits for three consecutive years (*ibid*). A performance management system was extended to all levels of employees, and scorecards were aligned with the IDP and the Service Delivery Budget Implementation Plan, ensuring that all employees were geared towards delivering on the GDS 2040 and its outcomes (CoJ, 2016a). However, as we shall see in Chapter 9, the performance management system lost its momentum over time, particularly to lower-level staff.

5.5.7 Accountability in the water sector

In the water sector, municipalities must report to national departments such as the Department of Water and Sanitation (DWS), and the DWS instituted water quality assessments known as the Blue Drop and the Green Drop. The Blue Drop Assessment pertained to drinking water quality, while the Green Drop measured wastewater quality. However, because these assessments were not regularly performed, they soon lost integrity and when they are performed (van Vuuren, 2011). Palmer et al. (2017) also identified other challenges that affected the general coordination of the water sector. These included poor data governance in terms of collection, collation, and flawed reporting processes. There were significant duplication and fragmentation in the collection of data; municipalities complained about the burden of uncoordinated and duplicated reporting. The coordination of Monitoring and Evaluation systems were also weak across the national departments that interfaced with local government. These challenges affected the effective regulation of service delivery at the local level. For example, Smith and Morris (2008) found that the absence of means to verify information independently was not helping municipalities to advance a pro-poor service agenda. They further argued that decentralisation and subsequent outsourcing by municipalities created many complex layers of legal oversight and reporting such that existing capacities were inadequate.

5.6 Conclusion

The main point that this chapter has made is that, for the three mayoral terms discussed here, the City implemented several changes and modifications and refined its governance structure. These changes occurred in the City's unique local circumstances and influenced the trajectory of institutional change in the City. The chapter has shown that achieving equity and efficiency was particularly acute in the water sector. In general, municipalities needed to respond to the needs of the poor and disadvantaged while operating efficiently to ensure that services were provided. In the case of Johannesburg, these tensions were pronounced. This was particularly the case after the creation of municipal entities where water services were provided by a separate entity whose operation was oriented towards profits and business principles as opposed to equity. Therefore, in the interest of building an efficient and accountable institution, the City engaged in a process of continual refinement of its administrative structures. The result of these reforms was that the City ended up with an expanded governance structure comprising numerous structures and actors, all involved in monitoring and overseeing water services in the City. Different parties and actors operated on the basis of particular norms and exhibited particular practices, and these are the subject of the following three chapters.

6 THE EXISTING GOVERNANCE LANDSCAPE AND WATER SERVICES GOVERNANCE IN THE CITY OF JOHANNESBURG

The previous chapter examined the broad spectrum of actors involved in various ways in the regulation of water services in the City from a historical perspective. It was shown that water services governance is a highly pluralised phenomenon occurring at various levels of government in the City's hierarchy and that there have been various changes over time. The focus of this chapter is on the two major actors involved in the regulation and oversight of water services in the City, namely Johannesburg Water (JW) and the City of Johannesburg officials. The aim is to dig deeper into how these two are connected and how they interact with each other to affect water service delivery. Drawing on extensive fieldwork and documentary analysis, the chapter deploys an Actor-Network Theory (ANT) approach to make the governance terrain more legible. It does so by identifying both the human and non-human actants and by analysing how these are enrolled through a translation process, to form a socio-technical network for delivering water services.

As discussed in earlier chapters, JW is a City entity involved in the actual reticulation of water to residents of Johannesburg and operates as a private company with a board of directors and staff. The entity is bound by a Service Delivery Agreement (SDA) and regularly reports to the City through various channels. Through several other instruments, JW is obliged to adhere to City policy regarding water services and to meet prescribed expectations. This chapter discusses City officials who are the main actors in regulating and monitoring water services in the City of Johannesburg. As the research found, these officials are located at various points and levels within the City's administrative hierarchy and exert influence on JW through either departments or committees.

Since JW operates at arm's length from the City, a mechanism needs to be in place to ensure that the entity delivers on specific targets as set in the City's long- and short-term planning documents, namely the GDS 2040 and the City's 5-year IDP document. The IDP targets, in particular, are important because there is a legal requirement. Municipalities are expected to report on those targets that National Treasury Department. The National Treasury department is the leading financier of local municipalities and places stringent

requirements on how municipal finances are to be managed and spent. The oversight role that City officials play is therefore critical, not only to ensure a constant flow of revenue but also so that service delivery targets are efficiently and equitably met, following national policy. In addition, since the City is the sole shareholder in JW, it has a particular interest in ensuring that JW remains viable through proper management. For these reasons, various structures and mechanisms have been put in place to monitor and regulate JW. Within these structures, City officials play a significant role.

6.1 Johannesburg Water

JW exerts major influence as a player in the water services sector by being a water services provider. Its institutional identity is that of a private limited company. The company was incorporated on the 21st of November 2000 in terms of the Companies Act No. 61 of 1973 and officially commenced business on the 1st January 2001 (JW, 2017). Its mandate is to provide water and sanitation services to residents of Johannesburg in terms of both national and City policy. At the time of this research study, the company employed 2 655 people and operated a network of 10 water depots and six wastewater treatment plants across Johannesburg (JW, 2017). Although operating outside the City, JW is wholly owned by the City and all the profits accrue to the City. The level of income determines the ability of local municipalities to delivery services. Incomes are either internal e.g. property rates and service charges or external e.g. transfer grants from national government. Stats SA estimates the service charges to be the main sources of revenue account for 42% of municipal revenue. For City of Johannesburg, JW and City Power are the main income generating entities such that service charges account for 51% the City's revenue (CoJ, 2020). Hence, the municipality takes great concern in ensuring that these two entities operate efficiently. The City's service delivery entities are not entirely independent as one official described JW:

> These companies are sort of independent up to a point. On the one hand, they feel accountable to their board but on the other, they are supposedly accountable to the City through the Service Delivery Agreement. But everybody knows that work according to the budget they get from the City. They are not really an independent company that can go and totally negotiate their own contracts, they are still bound to the rules of the MFMA, and they are still bound to the City's procurement to a large degree (Interview: R2: 2017. EISD).

This means that entities collect revenue on behalf of the City and it is in the City's interests that the entities operate efficiently.

6.1.1 The nature of JW

JW is the agent through which the City of Johannesburg delivers water and sanitation services to its residents. In terms of the Water Services Act, the City is the water services authority while JW is the water services provider.

As a private company, JW has a board of directors as its highest governing body. However, since it is its sole shareholder, the City Council appoints the board members and the board reports directly to the Council. On one hand, the City expects the company to operate efficiently in order to generate much-needed revenue, while on the other the City want to ensure that the company provides water equitably in ways that take into account past injustices in delivery. To ensure that this happens, the City and JW have entered into a Service Delivery Agreement (SDA), which binds both parties to make everything possible to ensure that both the financial and social objectives of the City are met. Within the City structure, Group Governance is the custodian of all the SDAs entered between the City and its entities and officials who regularly attend JW quarterly board meetings to assess the performance of the company.

6.1.2 Board of directors

At the apex of JW is the board of directors. The City is the shareholder in the company, so by 'City' reference is here made to Council. The Council appoints members of the board who are accountable to them. However, during the third electoral term, this responsibility is delegated to the Group Governance unit, which act as the City's shareholder representative in JW. The board is responsible for giving direction to the company with regard to its operations, functions, and developing company policies. Each quarter the board of directors convenes board meetings to assess the entity's performance. At the time of research, the JW's board of directors comprised 11 members.

6.1.3 The managing director

According to ANT, it is important to identify main actants. In the case of JW, the main actant with respect to how the company interacts with the City, is the Managing Director (MD). Although the company appoints a chief executive officer to run the company on behalf of the board, the MD is the main link between JW and the City. The MD reports directly to the City and is part of the City Manager's Executive Management Team (EMT), comprising heads of departments and group divisions. The MD reports the company's affairs in terms of progress in water and sanitation services across the city. The MD sits in a very challenging position where, on the one hand, he works towards achieving the company's business objectives as directed by the board of directors, and on the other hand, he reports to the City Manager, departments, and units on service delivery issues and obligations related to the company's service delivery agreement and corporate affairs. The managing director is thus accountable to both the board of directors and the City Manager. He or she oversees both the company's corporate affairs such as financial sustainability and progress towards achieving the City's mandate on service delivery. Figure 12 below shows the top structure of JW with the MD as the chief official.

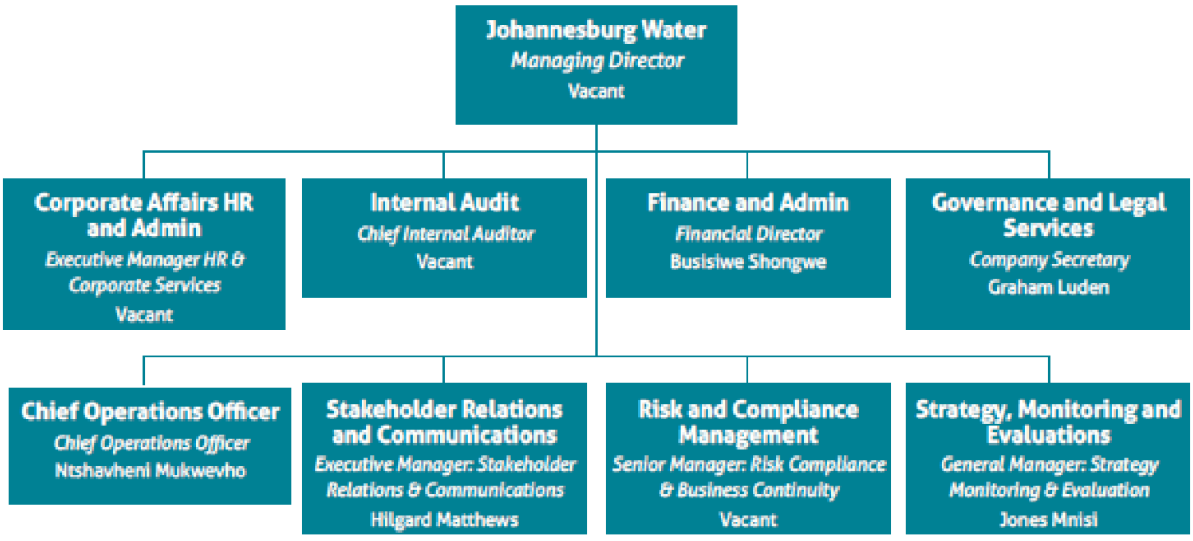


Figure 11: Executive management of JW
Source - JW Annual Report, 2016/2017 p.7

Given its role as the City's water service provider, JW is an important actor within the governance of services. The responsibility for ensuring that Johannesburg residents have

access to water lies with the City, but the implementing agent to fulfil this objective is JW. Hence, the City ensures that JW incorporates City policies related to water and sanitation services into its business planning process. The City analyses JW's scorecards presented to the board to assess if they align with national requirements and whether the stated targets are realistic. Although the board has specific objectives, the City as the shareholder sets the vision and policy regarding service delivery and ultimately approves the plans through the Council.

6.2 Set of practices JW adopts

To achieve the City objectives on water services, JW follows a set of norms and practices. These include board of director meetings and a range of reporting requirements that the entity undertakes through its various divisions, and which are collated by the managing director's office to submit to the City.

6.2.1 Board of Directors' meetings

During the quarterly board meetings convened by JW, the City is represented by officials from various departments and units, including EISD, Group Governance and Group Risk and Audit. These meetings focus on policy, governance, and financial issues. In the early years of JW, officials from the CMU represented the City in these meetings, as described by an ex-official:

> The CMU was really looking at service delivery agreements that the utilities, agencies corporations had with the City because ultimately, as you well know, the City is the sole shareholder of all of these companies, but the board governs them, but obviously, when the mayor says these are my top ten priorities into the strategic plans of the utilities. JW has its board and processes, and the board makes decisions related to the company. So they have their own board, and they have their own processes (Interview: R16, 2018).

During these meetings, the board and the City discuss service delivery issues, funding requirements and challenges that may be present. Negotiations occur regarding funding and service delivery targets, and according to some officials, these are done in good faith. However, sometimes there are mismatches of expectations between the board and the City, resulting in tension. One official described this as one of the major challenges of the JW corporatisation model.

> Since JW operates in terms of the Company's Act, it means they account more to the board that the City forgets its existence, and I think that is what the problem is. The boards are appointed by Council, and the board has more voice. It is a very complex model right now; you have got the MD for the company accounting to the board, the city manager, and the MMC, the political head (Interview: R8, 2017).

The City's Group Governance unit is responsible for the boards of directors of these entities and the appointment of board members, and officials sit in on every Board meeting. Group Governance monitors JW through service delivery agreements since it is the City's legal arm regarding the oversight of the entities. The City representative in the board meetings is someone with a legal background who can scrutinise all the entity's affairs from a legal perspective. The official in question claimed there were no secrets in JW that he was not aware of, since he attends all the meetings and formulates and regulates the SDAs (Interview: R20, 2019, Advocate, Group Governance).

> The board is responsible for approving the plans and all the reports that go to the City. The board must give consent to the City's report. We also need dual approval on things, we have to ask boards to approve them, and then we have to go and ask the Council to approve, which makes the value chain much longer and tedious. Boards are costly, and their removal would streamline the processes especially reporting (Interview: R11, 2017, ex-official, JW).

A difficulty cited by officials regarding the board was that the latter focused on targets and never bothered to go beyond. According to an ex-city official:

> Part of the difficulty was that the boards would run the utilities very much like 'what is the bottom line' and very much around revenue generation and had very narrow interpretations of what the mayor would determine as his top priorities (Interview, R17, ex-official, CMU).

Although JW has a fiduciary responsibility to act on behalf of and in the City's interests, several officials said that in many instances, the interests of the board and the City were not perfectly aligned, resulting in tension. For example, the City is accountable to the public for general service delivery and servicing poor households, but due to financial sustainability concerns the entity often ignores the City's plans. One official explained the problem as follows:

> In the City, Joburg Water has the most sophisticated infrastructure asset management plan, and between that and City's master plan, there are very different sets of priorities.

> Until 2013, Johannesburg Water was very good at coming to a negotiated list with us on which projects should be implemented. But, from about 2014 onwards, and I understand that it is continuing, they are ignoring the plan that gets approved in the budget, and they are bringing a separate capital project budget list based on their own plan. That is very problematic when the auditors come. This is becoming a bad habit of Joburg Water (Interview: R14, 2017, ex-official, Spatial Planning).

The board was therefore always careful not to make decisions that negatively impact the entity's revenue streams.

6.2.2 Planning and reporting

JW undertakes a business planning process together with the City departments and units. During this annual process, JW negotiates how much can be done in service delivery and what the costs are. These plans are a national requirement, and municipalities are assessed by national departments on whether they have these plans in place or not. An ex-official in the Water Services units described the process as follows:

> We have a business planning process every year around July/August. The entities have breakaway planning sessions in which we as the City are involved. During these sessions, we present the City's priorities that the entities must consider and include in their business planning process. However, it is not that the entities accept everything. It is always a fight. In these meetings, you have the executive management team comprising the Managing Directors, the CEOs, and all the executive managers. We usually break away for two to three-day sessions to discuss past progress, the challenges and make projections for future plans. In particular, we want to make sure that the entity's business is linked to the city's priorities. (Interview: R9, 2014, Water Services).

As demonstrated in the ANT frame, the City needs to ensure that JW acts and this is made possible through a set of instruments, referred to as artefacts, and observed here in the form of mandatory planning documents. The interaction between City officials and JW officials is such that the resultant plan satisfies both parties by ensuring that service targets and expectations are clearly inscribed. ANT predicts that weakly inscribed plans and policies may lead to inaction rather than action (Cresswell et al, 2010). Hence the planning sessions bring different parties together, help to map out different interests, and enrol the most powerful parties, namely managers, into the network.

6.2.3 The governance agency of the board

JW occupies an ambiguous position in the governance of water services in the City. It operates as a private company but is governed by the Companies' Act and functions more like a business. As a public entity, it functions as a service delivery arm of the City. These institutional identities have implications for the governmental agency of the entity. First, although the City of Johannesburg is the water services authority, the services provider function rests with JW; in other words, JW is responsible for the delivery of water to households and businesses. As a City entity, JW is expected to implement the national policy related to water services on behalf of the City, and to report quarterly. The City uses various mechanisms to ensure that JW considers all City policies related to water service delivery when they prepare their business plans. In many instances, the City develops a local policy in order to address a national policy. For example, there is a draft policy related to water scarcity, which the City must consider when planning water services. In response, the City has developed a series of water demand management policies designed to reduce consumption, and they have also been exploring alternative water sources. Some of these initiatives are turned into bylaws by the City and are enforced by the City's law enforcement agents, particularly the metropolitan police department JW thus works closely with the City's EISD to develop policies. Some officials report:

> Now, in the City, we have a department that deals with policy related to service delivery, and that is EISD. EISD is all about the policy, plans, and compliance; they hold JW accountable for those policies (Interview: R12, 2019, Director, M and E, GSPCR).

> In terms of the policy, regulatory framework, compliance with regulatory requirements, EISD is governing the sector and playing an oversight role. EISD will check whether JW has a water demand strategy or drought policy. The EISD assessment report is really informing the MMC as the political head how JW is performing in terms of strategy, policy etc. GSPCR and Group Governance do not assess whether JW meets its regulatory obligations, what is the thrust in water services. We, at EISD, play the strategy role on water services (Interview: R16, 2019, Director, Policy, EISD).

In other words, EISD monitors JW to ensure that its activities align with existing policies related to water services. This role is understood by City officials and is inscribed in City's official documents on policy regulation and oversight. Within EISD, this role is assigned

to a small unit known as Water Services Regulation and Policy Development Unit, and its primary task is to assess whether JW is complying with the regulations. For example, the unit checks whether JW has all the statutorily required planning documents in place, and in its quarterly report, JW is expected to report on all these issues.

JW also performs the role of water services provider on behalf of the City. This function involves the physical supply of water to the people and includes such activities as laying pipes, connecting households, and servicing informal settlements. JW is expected to draw up regular one-year budget plans known as Service Delivery Budget Implementation Plans (SDBIPs) and they are drawn with reference to the City's IDP. The SDBIP is a statutory requirement for all municipalities, and the National Treasury department, in particular, is interested in knowing what targets municipalities set for themselves. The City's executive management is interested in the targets that JW sets, as these also reflect on performance. The mayor and the councillors are accountable to the public for progress made towards service delivery. The role of JW to ensure that targets are met is invaluable because the entity is the water service provider. While the entity strives to meet targets, the City also takes an active interest in assessing JW's in meeting them, as one official said:

> So the monitoring starts by selecting the outcomes we want to monitor, setting the indicators that we want to track, collecting data against those indicators periodically as determined by the reporting cycle. That is the monitoring component, and then we also report against that and evaluations against some of those programmes.(Interview: R1, 2018, M&E, GSPCR).

The City, therefore, needs to ensure that the targets a clearly inscribed and that managers' contracts are entered into on the basis of the targets. This way managers are locked into the network and work towards achieving targets.

Lastly, while the board takes cognisance of the City's interests, the board of directors runs the company with an interest in the financial sustainability of the company. This interest coincides with that of the City in that both the City Manager and City's Group Financial Officer consider the financial sustainability of the City as critical. ANT predicts that where

interests between parties coincide, interessment or the process of negotiation and enrolment into a network gets easier and strong networks are easily formed. However, City officials reported that the JW board very often had a narrow interpretation of the City's policy, particularly when it came to meeting the social goals of equity. Since the Board had a greater influence on the company than the City, JW was reported as ignoring some expectations of the City hence weakening the entire actor-network. To get around this problem, the City expects JW to report on several indicators relating to service delivery as described by a JW official:

> We initiate the targets from this office [the office of the Managing Director] for each financial year and factor that into the Business Plan for the financial year starting in July. The board must approve this business plan with all the indicators. Every year, we analyse our scorecards, set the targets and present that to the board. The board will assess if the plan is sufficient and if it is in line with national requirements, whether all aspects are covered and whether targets are realistic or not. The board must agree. The board has its strategic advisor, KPMG accounting company, which will assess compliance and advise the board. So they give the board that comfort (Interview: R11, ex-official, JW: Office of the Managing Director, 2017).

JW regularly reports to the City regarding the KPIs and indicators listed in the SDBIP. This reporting is a statutory requirement of the City by the national government, and as such, JW is obliged to undertake it without fail. The average length of the report is about 96 pages. JW sends the report to various units in the City, including EISD, where this research was undertaken. Group Governance receives the same report as the City' shareholder representative in JW. They assess the report to see if the company is properly run and there are no deviations from what was agreed in the SDA. Group Governance is responsible for managing the service delivery agreement between the City and the entities. The service delivery agreement is essentially a legal document for ensuring that the company runs in terms of the Companies Act and is financially viable. Some officials summed up the role as follows:

> Group Governance monitors Johannesburg Water from a financial point of view. They check if Johannesburg Water is still a viable entity on its own. To do that, they use Service Delivery Agreements, which are standard across the City regardless of the entity. Group Governance does not ask the question as to why there is always a sewer spill at the corner of Jorissen Street; it is a question for EISD (Interview: R16, 2019, Director, Policy, EISD).

> The people that sit at Group Governance are the ones who assess the entities and give a financial assessment. Johannesburg Water reports monthly, quarterly, and ad hoc if there is a request. They sit with the city manager, they discuss capital expenditure issues (Capex), and they discuss Operational Expenditure (Opex). Moreover, the management of Johannesburg Water has discussed these things with the Board as the oversight. In the City, we use Group Governance to hold the boards accountable because the City appoints board members (Interview: R12, 2019, Director, M and E, GSPCR).

6.2.4 Challenges facing Johannesburg Water

There were mixed opinions among the City officials about JW's ability to exercise agency in the delivery of water services in the city. Some viewed the relationship between the entity and the City as problematic, while others thought that JW was not autonomous enough to achieve the objective for which it was set up because it has no budget of its own and is bound by public finance management rules in budgeting, reporting and procurement. Additionally, since the City is the sole shareholder, the entity is expected to comply with all the City's demands, which often causes tension. For example, one official said that tensions arise, particularly when the City either asks JW to address issues outside the original plan or when JW is asked to extend its services without additional budget allocations.

> One of the biggest challenges is addressing basic services, which are the services to informal settlements. In a metropolitan area like Johannesburg, the population is quite high, and there are many informal settlements. In the City of Johannesburg, there is a backlog in service delivery, and JW is not keen to provide services in informal settlements because there is no revenue derived. After all, here services are free because most people are poor (Interview, R9 ex-Director Water Services, EISD).

Hence, the issue of addressing equity falls back on the City. If the City does not provide a budget for JW to provide services in poor, JW has no incentive for providing services there. At the same time, the City is not keen on doing so given that no revenue is expected to come from these poor areas. As a result, there is tension between the Board of JW and the City when it comes to addressing issues on poor and informal areas of the City. Although JW is run by a board, it is expected to fulfil the demands of the City, such as providing free services to communities in informal settlements. This curtails the autonomy of JW to operate efficiently. As one official noted, the problem applies to all the entities:

> These companies are independent but up to a certain point. On the one hand, they feel accountable to their board; on the other, they are supposedly accountable to the City

> through the service delivery agreement, but everyone knows that since they get their budget from the City, they are bound by the City's rules (Interview, R2, 2017, Deputy Director, Open Space Planning).

In summary, JW is an important player in providing water and sanitation services in the City of Johannesburg. The company exercises a certain level of autonomy in deciding what activities to embark on and the board of directors can dictate which projects get priority. However, it was very clear from the officials that the company's agency was highly dependent on the City. The City sets policy, participates in drawing the entity's plans, and ultimately approves and allocates its budget. The City also sits in the company board of directors meetings and monitors the service delivery agreement. This means that JW influences water services in the City but within the limits of the City's parameters. An official who spoke in confidence said that there is rumour in the City corridors that JW has two sets of accounts, one, which it presents to the City in terms of the regulations, and another that genuinely reflects its state of affairs. However, JW argued that the entity was under no obligation to report everything to the City but only what the City requires in terms of the SDA and the SDBIP. A JW official said:

> The SDBIP is an annexure of the City's IDP and contains the indicators for each department and each entity. However, as JW, we do not report on everything that we have in our balanced scorecard. Since we are doing the work, we contribute to the implementation indicators. So you will find that the City's targets in the SDBIP are also on our balanced scorecard, but not everything we have in our balanced scorecard will be reported at a City level. It is part of our corporate function, and we have no obligation to report that to the City (Interview: R11, 2017 – Ex-Official Joburg Water – Office of the Managing Director).

This information cast doubts on the ability of the City to oversee and regulate JW since the latter does not report on all its affairs to the City. JW also claimed its status as a private company that reserves the right to share information. However, as shown in the preceding sections, the City has a set of norms and practices for monitoring and regulating water services in terms of planning and reporting.

6.3 City of Johannesburg – An encounter

This research was motivated by my personal encounter with the City administration and officials in 2014.

6.3.1 Initial encounter with the City

As a preface to this analysis, I insert a brief story of my encounter with JW and City officials, prompting the search for who actually governs JW. As noted very early in the thesis, the City of Johannesburg has a vast and complex administration, and the following story gives a glimpse of the complexity and opaqueness of its governance structure.

> On January 16, 2014, I contacted the JW head office requesting domestic water consumption data for specific communities in the City. Using these data, I intended to analyse the impact of pre-payment meters on domestic water use behaviour among residents of Soweto, a large predominantly black township southwest of Johannesburg CBD. These residents had earlier contested the meters as discriminatory and unconstitutional. The matter was eventually settled at the Constitutional Court, where the court endorsed the City's use of the pre-payment water meters. My research came five years after the court ruling, and the aim was to analyse changes in water use behaviour by these residents. I submitted a formal request for data to JW. After five months of negotiation, JW responded that they were not able to share the data with me. Part of the response read as follows:
>
> > The Chief Operation Officer's office (the authorised signatory) has unfortunately advised that this is not an opportune time to release any information relating to prepayment meters. Johannesburg Water has some ongoing challenges and conflicts in some of the communities and would rather have these be resolved before any research work is done in the affected communities. However, he has indicated that he is willing to review the request at a later stage, as he does recognise the value of the research (Email from Johannesburg Water Manager for Business and Innovation, June 2014).
>
> I decided to approach the City, hoping that the City would source the data on my behalf. I was puzzled by the City's response on the matter where one official said:
>
> > Ah, you should have come to us first. Now that they have refused, we cannot come in and reverse their decision – they are a private company with their own rules (Interview: R9, 2014 - ex-Director of Water Resources and Biodiversity)
>
> I could not understand why the City could not overrule a decision made by their own company. Hence, I became inquisitive to know more about how water services were governed in the city, which parties were involved and how they were connected, their responsibilities and powers, and who was the final authority in the City.

6.3.2 Questions emerge

This brief encounter with JW and the City brought the City's control over JW into question. The central question of who governs water in the City of Johannesburg emerged. The

encounter showed that, although there was a possibility of using the City's authority over its water utility to acquire information, the City had ceded considerable autonomy to the entity such that attempts to bring visibility into the sector using data were rarely entertained (Discussion: R13, 2017; Interview: R16, 2017). Several City officials also expressed frustration with JW regarding accessing information. This episode revealed that the City's governance landscape was complex, opaque and difficult to navigate.

Officials in the City acknowledged this complexity and attributed it to the ongoing adjustments and refinements to the City's administrative structure since 2000 (Interviews: R2, 2017; R8, 2018, R13, 2017). As discussed in Chapter 6, these reforms resulted in a highly complex and expanded structure. An expert on local government argued that South African local government, in general, was very complex. She said:

> Local government in South Africa is far more complex and far more complicated than people are willing to admit. Everyone likes to blame the local government when something goes wrong, and everybody likes to say how useless they are without understanding how it functions. Local government is by far the most complex sphere of government and is the most opaque because that is where implementation happens – that is where the rubber hits the road (Interview: R10, 2017, Local Government Expert).

6.3.3 The City – a multiplicity of components

Despite the complexity and opaqueness of the structure, the City's role in monitoring and overseeing the affairs of JW remained vital and occurred through several internal mechanisms, departments, units, officials and a set of norms and practices. This part of the chapter identifies the various parties involved in monitoring and overseeing Johannesburg Water, what norms they use, and what practices these norms engender. According to Gupta (2010), the notion of a unitary state is false. Hence the term 'City' is misleading; it gives an impression of a stable and robust entity when, in reality, a city government comprises a multiplicity of components that interact with each othe. I, therefore, deployed ANT to untangle this complex system and shed light on who governs JW. Two main arms exist, namely the political and the executive.

6.4 The political arm

Figure 12 below shows a skeletal view of the City's organisational structure and how it relates to water services governance. The key actors in the scene are shown and fall into two main categories: the political arm, and the executive arm. Given that water services are provided through a private utility company, the role of these two arms is reduced to one of policy formulation, regulation, oversight, and monitoring. The City fulfils this role through various departments, units, subunits, and individuals that form a vast actor-network of people and artefacts that serve as intermediaries for linking the various actors.

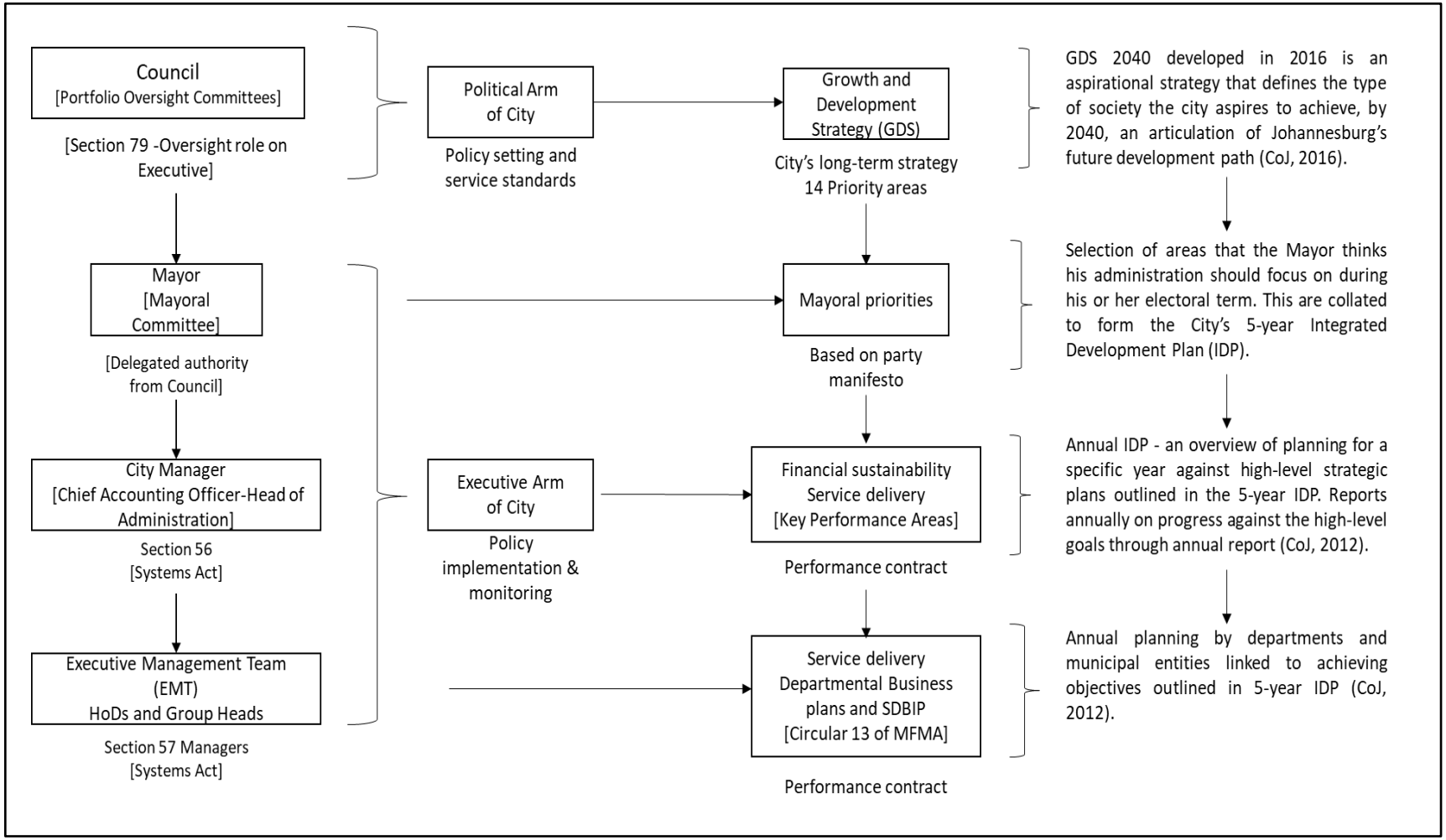


Figure 12: A skeletal view of the City's governance structure
Source: Author's compilation

6.4.1 The Council

The city's political arm comprises councillors from the various political parties elected either as ward councillors or through the proportional representation principle. Figure 13 below shows the distribution of the 265-member Council elected in 2016. The African National Congress (ANC) had the highest number of councillors at 118, however, it fell short of the majority required to head the City's administration. Similarly, the Democratic Alliance (DA) came second with 103, and in order to lead the administration, the DA entered into a coalition with the Economic Freedom Front (EFF) party, and Herman Mashaba of the DA was elected as the new mayor of Johannesburg.

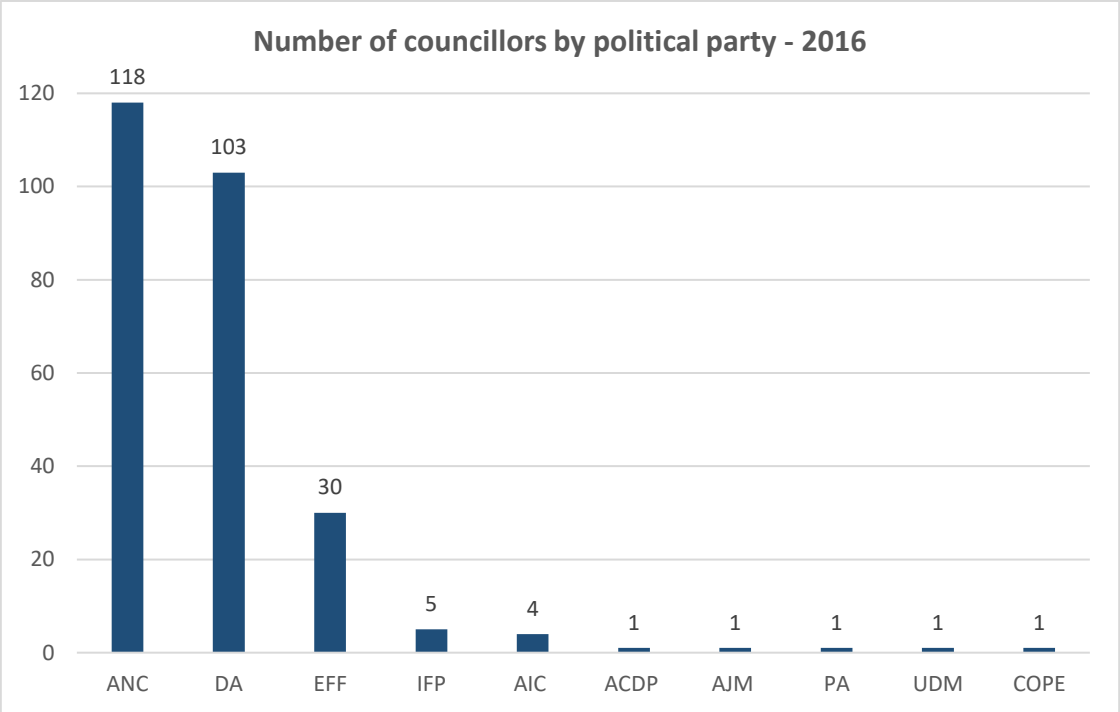


Figure 13: Distribution of Councillors by political party
Source: CoJ (2016b)

Like all municipalities in South Africa, the Council of the City of Johannesburg performs a dual role. It makes laws necessary for governing municipal affairs within its jurisdiction and runs the City administration by delegating executive roles to the executive mayor and the mayoral committee. These roles are summarised as legislative and oversight. The Council also facilitates participatory governance by allowing political parties to publicly debate issues relating to service delivery. Specific tasks assigned to the Council include

the approval of by-laws, policies, the IDP, tariffs for rates and service charges, and the budget (CoJ, IDP, 2006). However, the most important role of the Council is that of oversight. According to Section 79 of the Municipal Structures Act 117 of 1998, local municipalities must set up oversight committees known as portfolio committees. The main purpose of these committees is to hold the executive, the mayor and the MMCs accountable for the executive decisions they take (CoJ, 2012, IDP).

Some City officials argued that the Council is a very powerful organ because it gives final approval on all City affairs. For example, the City's IDP, the Budget, and the appointment of senior officials, among others, must be approved by the Council. An official in EISD said that the politicians were essentially running the City because they make all the decisions, formulate policies, and their consent is sought on all matters. A senior official in EISD said that it did not matter whether the administration saw the value in a project: 'If the politicians are not supportive of it, you will never get the funding' (R18, 2017, ex-Finance Director, EISD). In support, another official said that the Council had the final decision. Everything that officials do must go to the Council: 'We report to Council as a department' (Interview: R29, 2017, Water Quality, EISD). In contrast, another official saw the Council as simply an approval system of the City, although she acknowledged that debates do happen. She said:

> Council is more like your rubber-stamp approval. They do debate very much, yes very much, and the DA, in particular, takes on any issue. It is not to say that approvals are given just easily; debate happens (Interview: R9, 2014 ex-Director at EISD).

A senior official present during the formative years of JW shared a similar view. He said:

> And of course, he was not getting a rubber stamp on everything; they were like serious engagements, so it went through Council structures and committees and so on (Interview: R15, 2014, Ex-Director – Central Strategy).

Typically, in any municipality, one would find that Council has the overall responsibility and assumes the role of Water Service Authority. However, the actual execution of this work is spread across a wide spectrum of actors such that lines of accountability are blurred. Hence, while overall responsible, Council is not in full control of the entire governance landscape. The next section discusses some of the practices that the Council

deploys in the entire actor-network. The Council relies heavily on committee systems to execute its functions, and issues are elevated to full Council level when approval or major decision has to be made. In the meantime, Council subcommittees deliberate on specific details with the assistance of technical experts.

6.4.2 Council sub-committees

Apart from the Section 79 Portfolio Committee, there are several other Council subcommittees in place to deal with specific issues. These include the Mayoral Committee and the Budget Steering Committee. The Mayoral Committee is made up of members of councillors from the majority political party chosen by the mayor to support him. Members of the Mayoral Committee (MMCs) are appointed as the political heads of the various line departments in the City (as shown in Figure 1). One official described the Mayoral Committee as acting like the 'politburo at national level which supports the president, and it is the big committee that you have to consider' (Interview: R9, 2014, ex-Director at EISD). Under the mayor's leadership, the Mayoral Committee sets the City's priorities for a particular electoral term.

The Budget Committee was also described by officials as a very powerful committee given its ability to allocate budgets across different departments. Officials in the City agreed that project successes depend on the budget and that the City's budget is modelled around the City's Spatial Development Framework. This framework shows how the City is expanding and where the major infrastructure developments are happening. All other projects are expected to align with the Spatial Development Framework if they are to attract the attention of the budget committee. An ex-official described how it was essential to collaborate with the budget office. He said:

> As part of that planning process, our key ally is the Budget office because they have got in terms of the MFMA guidelines, very strict requirements, expectations, and boxes to tick. We also have to keep in touch with them because they drive the City's budget process too. Our other allies were EISD, Infrastructure Services Department, and they would sit in on the discussions relating to the entities that they are responsible for, in other words, the income-generating organisations, like Joburg Water, City Power and would then send their representative. Then, on the other hand, the Budget office would also deal with the

> expenditure side, expenditure of capital. Our main aim was to align the budget with the spatial plans of the city. (Interview, R8, 2017, ex-official, Spatial Planning)

Thus, while one would expect Council to be the main actant in the planning network, this research shows that the Budget Committee and the Budget Office have an ultimate influence on the types and scale of projects that the City undertakes.

The mode of operation for the Council through meetings and these meetings are ordered. A Council meeting schedule is drawn at the start of each financial year, and this schedule is strictly followed. Figure 18 below shows the schedule of meetings for the 2019/2020 financial year. Through this schedule, the Council exerts tremendous influence on the functioning of the City, subcommittees, departments, entities and units because they must plan their work around these dates. If an official, department, or entity has a project or programme that requires Council approval or budget allocation, these are approved by the Council. Officials, therefore, need to make sure that the project documentation is ready before the next Council meeting. If officials miss the date on which Council sits, it means waiting for the next sitting because the meeting dates are fixed. One official described the situation as follows:

> We have a calendar for the year, so you know exactly what date every committee sits, Council, Section 79, everything. They give you the year calendar way ahead of time to plan to say that I want these documents submitted by this date. So you do not have an excuse unless it is something that came up without you planning for it. (Interview: R9, 2014 Ex-Director at EISD).

6.4.3 The Member of Mayoral Committee as political heads of Departments

Each line department in the City has a political head in the form of a Member of the Mayoral Committee (MMC). Although the Executive Director is official responsible for overseeing the entities within his or her department and for ensuring that certain performance levels are attained, the MMC as the political head is very influential. For example, one official said the “MMC is politically powerful; he or she can reverse decisions made by the companies. It does not happen often, but it does happen sometimes” (Interview: R9, 2014 ex-Director at EISD). ANT predicts that where actors are active and influential, action tends to occur. This was particularly the case with the MMC for EISD who was in office during the time of research. Councillor Matshidiso Mfikoe, a very

powerful and forceful figure in the Department could easily rally officials behind her and even push issues into Mayoral Committee meetings. This is how one official described her:

> So our MMC is our political head; she reports to the mayor. During our quarterly meetings, she usually says that 'service delivery is depended upon people seated around this table, if we fail, we fail the City'. So, there is a lot of pressure on service delivery. In her capacity as the political head, she does influence what the entities must do. Our MMC is so strong that sometimes she turns around decisions that the company has taken. It does not happen often, but it sometimes happens (Interview: R9, 2014 ex-Director at EISD).

Hence, where the political arm is very strong and hands-on, there are greater possibilities that officials can influence the JW directly.

6.4.4 Appointment of Board Members of Johannesburg Water

The authority to appoint boards of directors is vested in Council. The procedure for appointment of the board of directors is set out in the City's *Group Policy on the Shareholder Governance of Boards of Directors of Municipal Entities* document, and by the King III Code of Governance Principles. Hence, to a larger extent Council influences the affairs of JW through the Board which also reports directly to Council. The relationship between the board and Council was described by officials as follows:

> Council has a direct relationship with the board in terms of accounting, but any other accounting that happens goes through the Executive Director, from the Managing Director of JW to the City Manager. That is how it is organised. But the board does not account for the City Manager because it is appointed by the Council, it accounts to Council directly (Interview: R1, 2017, Director MandE, GSPCR).

Since the Council has the ultimate authority to appoint board members, it can influence the entity by appointing board members that support Council policy. First, the national government recognises the Council as the municipality and only works directly with the City and not JW. Second, all planning documents are approved by the ,Council, and third, the Council is the sole shareholder in the company. For these reasons, the board members are expected to be more inclined to support Council initiatives. The expectation in the appointment of boards is that they must further the City's mandate. The Council

has 100 per cent sharing in JW; hence, while they are run privately, the Council must approve all their plans (Interview: R1, 2017, Director MandE, GSPCR).

6.4.5 Political party debates

The role of the Council in the monitoring of JW also occurs at partly level. As noted in an earlier section, the Council comprises councillors from different parties, and the different parties always act to discredit other parties. The Section 79 portfolio committees comprise ouncillors that always exert pressure on the ruling party and perform as watchdogs. They scrutinise the reports from the entities and try to discredit them. Several officials raised the issue of party politics as a phenomenon at play in the monitoring of JW. On the one hand, the opposition parties act to discredit the ruling party, while on the other hand, the ruling party responds by manipulating the system to evade criticism.

> In my experience, the opposition DA party often interrogates the reports and ask lots of questions. The ANC politicians would often report to the issue from the gut and from experience of what they know on the ground, but the DA will find a way to poke holes in the report, especially if they, in this administration it may not be done as much, but in the previous administration, anything you gave the DA will poke holes to find fault (Interview: R25, Director, Public Safety, CoJ).

Officials noted that reporting in the City faces challenges due to the different political parties also fighting to discredit each other. Officially, quarterly reports from the entities must pass through Section 79 committees before getting to the mayoral committee. However, the officials interviewed said that the ANC administration altered the flow of the reporting such that reports went to the Section 79 Committee after the Mayoral Committee had made decisions. The anomaly was described by one official as follows:

> Now, the report is not sent to Section 79; they only get it after the mayoral committee has deliberated it. I do not know if the Democratic Alliance has quite got their head around this. They sit on these Section 79 committees and say, ‘I am very important’, and I am saying, ‘No, the decisions are already taken, guys at the mayoral committee!’ That is where the power is (Interview: R2, 2017, Deputy Director, Open Space Planning).

This scenario directly contradicts the essence of Section 79 Committees whose mandate is to oversee the executive on behalf of the Council. While Section 79 committees play this oversight role over the executive arm of the City, they do not have any decision-

making powers and can only make recommendations. Consequently, the Mayoral Committee becomes the most influential committee and has the added advantage that it is composed of members from the ruling political party.

Party politics has also been seen to affect the appointment of senior executives. For example the EEF was said to oppose any appointments of white executives to Executive Director positions. This was so rife that one officials said

> EFF is running the country not the DA. Whatever the DA suggest, EFF just blocks it. (Interview R16: 2017, EISD).

6.5 The executive arm of the city

The executive arm on the other hand is the City administration, headed by the mayor, who executes his office with the help of a Mayoral Committee. Below the mayor is the City Manager and members of the Executive Management Team (EMT) who are essentially Heads of line Departments and Groups. The following section discusses the executive mayor.

6.5.1 The executive mayor

From an ANT perspective, the executive mayor is the focal actor in the City's planning network given his role in setting service delivery priorities. During his or her term of office, the mayor, with the help of the Mayoral Committee, decides which developmental areas are to be prioritised during the electoral term. Once elected, the mayor has power vested in him or her by the Council. As one official described it, the Council 'delegates its duties based on the delegation rule' (Interview, R20, 2019. Advocate, Group Governance). However, although the mayor acts on behalf of the Council, officials interviewed regarded him as the highest point of authority in the entire City administration. He, together with the MMCs, takes binding decisions[11]. One official said that 'the mayor is important in setting priorities for the city' (R24, 2018, ex-ED, Spatial Planning), and another said 'he has decision making powers, he is an executive mayor, he takes decisions' (R2, 2017, Deputy

[11] Since 1996, all City of Johannesburg mayors have been male.

Director, Open Space Planning EISD). This quote shows the centrality of the mayor in the City:

> Annually there is a Mayoral Lekgotla (a strategic meeting) where the Mayor decides based on the GDS 2040 what his priorities are out of those listed in the GDS. At that Lekgotla, the Mayor has already sat with the Mayoral Committee and agreed that these are the priorities that the Mayor wants departments to focus on in the next 2-3 years (Interview, R9, 2014, ex-Director of Water Services unit in EISD).

This research straddled the terms of two mayors, Parks Tau and Herman Mashaba, who had different sets of priorities. For example, Tau (2011-2016) was more concerned about positioning Johannesburg internationally and was an advocate of a green economy and green technology. Mashaba, on the other hand, was more inward-looking and business-oriented. He proposed a plan to rejuvenate the inner city of Johannesburg and created business opportunities for local entrepreneurs. As ANT would predict, the focal actors take steps to enrol other parties into the network to ensure that their plans are executed. This enrolment takes place through the Mayoral Lekgotla meetings[12] and here the mayor calls upon all City departments to design department plans oriented towards fulfilling the Mayor's priority areas.

6.5.2 Mayoral practices for enrolling members into an actor-network

The mayor uses a set of distinct practices to exercise agency in the City and influence JW with respect to water services. First, the executive mayor has the power to make decisions about developmental priorities and basic services. As a result, the executive mayor can influence the direction the City takes. For example, Mayor Tau introduced the Corridors of Freedom programme; a development programme that uses transit-oriented development to reverse the apartheid geography, create jobs, and increase mobility.

Secondly, national policies require that the mayor approves the policies and plans of the City. For example, the Water Services Development Plan is approved by the mayor. If the national department comes down to assess the City and finds that the plan is not

[12] Mayoral Lekgotla's meetings are special strategic meetings called by the executive mayor to discuss and approve annual plans for the various departments. Departments and entities present their proposed programmes and these should be in line with what the executive mayor hopes to achieve during his term.

approved by the mayor, the City is penalised (Interview: R13, 2016. Deputy Director, Water Services). The business plans of the various departments and entities must satisfy the mayor; otherwise, the mayor rejects the plans - as one official described:

> The mayor will say, go back and rethink to come up with better indicators or targets. For example, we have been given targets by the Department of Water Affairs, and the mayor is taking that very seriously. He wants to see what it is that we are going to do to address acid mine drainage. If he does not see that strategic thinking is happening, he will tell us to go back, redo, rethink and come back (Interview: R9, 2014, Director, Water Services).

Third, the mayor uses the annual Mayoral Lekgotla to convey his vision for the electoral term. During the lekgotla, all departments, groups and entities are represented by both senior and junior officials. The mayor outlines his vision and announces his priorities. The various departments have breakaway sessions to outline their plans and to address the mayoral priorities. An official in the City described the lekgotla meeting as follows:

> Annually, there is a Mayoral Lekgotla where the Mayor decides, based on the Growth and Development Strategy, to say, I want you to focus on these priorities. There are ten priorities, but he narrows them down and says that I want you to focus on these during my term of office. There are things like financial sustainability, resilience, resource sustainability, water security, energy, green technology, etc. Then we as departments and entities need to go back to plan how we will achieve these mayoral priorities within our different spheres. Some of the priorities require us to work together as departments (Interview, R9, 2014, ex-Director Water Services).

Fourth, the mayor can have his priorities reduced to plan and then affixed in the IDP with specific targets that have to be achieved. Once the priorities have been set, departments prepare individual plans to achieve them. These departmental plans are collated to form the City's five-year Integrated Development Plan (IDP), a statutory requirement for all municipalities in terms of the Municipal Systems Act 32 of 2000. The IDP is then broken down into annual plans known as Services Delivery Budget Implementation Plans (SDBIP), where specific targets are set which entities like JW are expected to meet. The SDBIP assures the mayor that his priorities will be realised. Mayor Tau introduced the idea of visible service delivery and set up a Joint Operations Committee (JOC). JOC comprised representatives from all line departments, groups, and entities and was

chaired by the Mayor. The committee met every Wednesday without fail to discuss the state of service delivery in the City.

The mayor is clearly a central figure in the monitoring and oversight of JW because by setting priorities, the rest of the targets and monitoring frameworks are determined, and all units work towards fulfilling the mayor's priorities and regularly reporting on them. Although the IDP is annually reviewed, it is a fixed plan for the five-year mayoral term that determines what the City ought to achieve in service delivery. An ex-advisor to mayor Tau described the mayor's position as follows:

> The mayors constitute the central point of authority. Their plans are codified in IDPs and SDBIPs. The rest of the City is responsible for implementing them. However, the mayor remains accountable to the public and takes personal responsibility for everything. Therefore the mayor's office is supposed to be hands-on because the mayor has to account back to the people directly, and when he accounts to the people directly, he cannot say it is not me it is so and so (R32 – ex-Advisor to Mayor – Environment, 2016)

Ultimately, the mayor is responsible for and must report on the IDP's achievement at the end of his term. Hence, his interests lie in ensuring the City and its entities are working towards achieving these targets.

6.5.3 The office of the mayor

The mayor also exerts influence through a team of experts that make up the mayor's advisory team. These officials gather intelligence, analyse data, and support the mayor with operationalising some of his or her ideas. For example, GSPCR was located in the mayor's office, and their job was to develop long-term strategic plans for the City, report on IDP target progress, and attend to any emergency queries raised by the public. During the research, Mayor Tau had a team of expert advisors for different focus areas helping him to turn his ideas into projects or programmes. An ex-advisor described this role as follows:

> So our jobs, I am special advisor priority projects, Bongani is programme manager priority projects. Therefore, we are rather a strange piece. We are a two-man team; we are not designed to be a project management office necessarily. We are tasked with conceptualising, coordinating, and leading priority projects. So in discussion with the mayor and led by his imperatives, he will give us a series of big ideas that he wants to see materialise, and we will

> refine those with him and with our own peculiar set of expertise, we will then refine them. We translate the mayor's crazy, grand, and brilliant ideas into executable projects within the city (Interview: R6, 2016, Executive Mayor's Office, CoJ).

Through these various channels, the mayor thus exercises agency over all City departments and entities. His designation as executive mayor allows him to enrol members into his actor-network and direct the network to meet his developmental goals. This influence extends to JW through the MMC, the City Manager officials in EISD, GSPCR, and Group Governance. As politicians, the mayor will demand data and figures to report to the electorate, and the officials in GSPCR compile reports for the mayor on targets as achieved.

6.6 Conclusion

This chapter set out to analyse JW and the City's political executive leadership and their roles in monitoring and overseeing JW. The chapter further looked at the existing norms and practices and how different actors exercise agency in JW. The chapter looked at JW as an organisation and how it functions to fulfil the City's mandate of delivering water services to the residents of Johannesburg. Although this research was not focused on JW per se, the analysis from a City perspective shows that JW is a critical player in the City's water sector. While the company exercises some autonomy and works under the leadership and direction of a board of directors, JW operations depend on what the City sets as its policy parameters on water and sanitation services. The City sends representatives to the board of directors meeting to ensure that the City's demands and expectations regarding services and governance issues are taken into account by the entity. However, JW has the problem of dual identity, which tends to affect its agency in the water sector of the City. On the one hand, it is a public entity belonging to the City, and on the other, it is a private company governed by a separate board of directors. City officials noted how difficult it was to get information from the entity beyond what the entity reports to the City every quarter. They also noted that the entity sometimes disregards the City, particularly when planning for the long term and responding to urgent demands by City. From the City's perspective, the centrality of the mayor in steering the City in a particular direction was highlighted. The mayor and members of his mayoral committee form a very influential player in City governance by setting the vision and developmental

priorities through a compulsory lekgotla meeting and locking other actors into an actor-network through statutory instruments such as the IDP and the SDBIP. The mayor's agency on JW is asserted through the entity's quarterly reporting requirement, culminating in a report at the end of each financial year.

7 ACTORS AND ACTANTS AND THE REALITY OF WATER SERVICES GOVERNANCE IN THE CITY OF JOHANNESBURG

The aim of this chapter is to analyse the key actors that comprise the core administration of the City and how these actors associate and exercise agency on JW. We have seen in Chapter 6 how the City administration comprises groups, departments, units, and individuals. All of these work in various ways to influence JW in terms of water service delivery in the city. The chapter also focuses on actors and actants and the reality governing water services. A major finding of this thesis is that, although the City has an oversight and monitoring role over JW, this role is disaggregated and spread across various units, departments, and individuals in the City structure. Consequently, it is unclear where the authority and responsibility for regulating and overseeing JW lie. The principles of New Public Management are clearly evident in the manner in which the entire task of service delivery has been reduced to small and multiple work packages to be measured and assessed (Hibou, 2015). Lower-level officials are assigned discretionary powers.

In addition, the multiple identities associated with JW have also influenced how the City carries out its oversight and monitoring role. On one hand, JW is a private company while on the other, it is wholly owned by the City and there it is a public entity. Political, public and shareholder interests intersect over this entity and may in one way or the other attempt to exercise agency on the entity. In the previous chapter, the political actors and their interests were considered. This chapter focuses on City officials, departments and units whose primary goal is to ensure that JW fulfils both public and shareholder interests. Over the years, the City has expanded its structure, refined its systems and introduced a set of norms beyond what is prescribed by law to ensure that entities like JW are effectively monitored. However, the resultant governance structure has become complex and difficult to navigate for officials thereby compromising the City's oversight role by defusing power and blurring lines of responsibility. According to one ex-official, if JW messes up or fails to comply with national regulations, it is unclear 'whose head rolls' (Interview: R17, 2017, ex-Director, CMU).

7.1 The City – its size and actants in the oversight function

The institutional history of the City of Johannesburg, described earlier, showed that since the creation of the single administration city in 2000, administrative changes have been implemented during each successive electoral term. The result was a hallowed structure with numerous parties.

7.1.1 A hollow state

The City went through several rounds of reforms, and the 2011 reform, in particular, resulted in an expanded structure that was in place during the time of this research. At the time, the City felt a need to remodel its governance structure in order to effectively regulate, oversee, and monitor the affairs of the entities responsible for service delivery. In October 2012, then Mayor Parks Tau reported that the administrative changes were designed to align the City structures to the long term strategic plan, the GDS 2040. These changes included the introduction of a Cluster System. However, the changes resulted in an expanded City's administrative structure which, instead of strengthening its hold on the entities, compromised the City's influence on JW by introducing multiple and blurred lines of responsibility. A City official interviewed described the situation as follows:

> What has happened is that, because the number of people who are doing a form of oversight has expanded, there is a danger from a governance point of view that things fall between the cracks. Therefore, everyone is doing a bit, but everyone is sort of waiting for the other one to drive the goal home. There is her portfolio, she can take it up, so we are all looking. This has almost weakened us because we are all waiting for the other one to do it. We have three parties all involved in a way in the same issue, and it kind of muddies the waters as to who is taking charge now. If you break down the role, she is doing a bit, we are doing a bit, the City Manager is doing a bit, so there is not clearly one person who is the Water Services Authority, we are all. (Interview: R2, 2017, Deputy Director, Open Space Planning).

The exercise of mapping the various actors involved in oversight and regulation using the ANT technique revealed that the City structure was opaque, highly fragmented, and duplicated certain roles. Municipalities are legally required in terms of the Municipal Systems Act 32 of 2000 to put in place a system for monitoring service delivery. Where external entities are involved in service provision, as in the case of water for Johannesburg, a system for overseeing and regulating the affairs of the entity is required

(RSA, 2000). A former director for the Water Services and Biodiversity said 'because Joburg Water performs the water services provider function, we as the City, play a local regulation and oversight role over Joburg Water to ensure that the services are delivered effectively' (Interview: R9, 2014, ex-Director – Water Services). However, as this research shows, the role of oversight and regulation that the City plays is spread across several units that often operate independently of each other. As one JW official said, 'the City works in silos, they have this silo mentality' (Interview: R11, 2017). Ultimately, the City's authority over the entities is polarised.

7.1.2 Parties involved in overseeing water services.

Based on an analysis of documents and reports, I generated a sketch diagram showing the various parties involved in the oversight of water services. While these are presented here as distinct entities, numerous connections exist between them. These are shown in Figure 14 below.

Council	Executive	EISD	JW
Council *(Final approval body)* Section 79 Committee *(Oversight body)*	Mayor *(Priority setting)* Mayoral Committee *(Priority setting)* City Manager *(Accounting officer)* Group Governance *(Compliance monitoring)* GSPCR (Service target monitoring: IDP) GRASS *(MFMA compliance)*	MMC *(Political heard - Policy)* Executive Director *(Accounting office: Department level)* Director *(Water services – planning)* Deputy Director *(Regulation and policy development)*	Board of Directors *(Financial sustainability)* Managing Director *(Operational efficiency)*

Figure 14: The three main parties overseeing and monitoring JW
Source Author based on CoJ planning documents

Typically, in any municipality, one would find Council, the executive, and line departments such as EISD in oversight functions. However, Figure 21 presents JW as an additional actant in the water sector with its Board of directors and its Managing Director as key actants. Units such as Group Strategy (GSPCR), Group Risk (GRASS) and Group

Governance also perform various forms of monitoring and require JW to report to them on a regular basis. Officials interviewed share similar concerns that the existence of these various bodies have led to duplication and have placed unnecessary reporting burdens on JW. One JW official said

> There is a whole lot of duplication in terms of reporting. We report to the City through Group Strategy because they do monitoring and evaluation: they will send us spreadsheets for us to complete on our achievements for that particular quarter. Then there is also, what they call Group Risk Audit which also does the very same work that GSPCR is doing: they will want an evaluation from us, they will want us to report to them, and they want us to send us supporting documents for them to do their verification. So you do find that we spend a lot of time reporting to the City over one thing. In any case, we give them a quarterly report every quarter it is mandatory. We also provide a report to Group Governance because they are responsible for managing the entities' (Interview, R11, 2017, JW).

There is thus evidence that the reforms introduced in 2011, rather than streamlining operations, they made the City administration to be more complicated. The rest of this chapter analyses the different actors and discusses their agency and norms and practices in overseeing JW.

7.2 The Executive Management Team (EMT)

The executive management team (EMT) forms the core administration responsible for the day-to-day running of the City's affairs. The EMT comprise senior managers in both the City and the entities, who report to the City Manager. Together with the executive directors of the line departments in the City, the Group Heads and managing directors of the City's entities are called Section 57 managers. These officials are employed on the basis of 5-year contracts and are incentivised by performance bonuses at the end of each year.

7.2.1 The City Manager

The post of City Manager or municipal manager is common to all local municipalities in South Africa and is required by legislation. Section 54A of the Municipal Systems Act, 2000, provides for the appointment of municipal managers, while Section 57 (6) of the same Act states that these managers are employed not just based on merit but are employed on fixed 5-year contracts. The City Manager is the head of administration, and

he/she performs his/her function with the assistance of an executive management team (EMT). The City Manager's main role is to ensure that the City's vision and mission are realised through effective service delivery as envisioned by the mayor and council (CoJ, 2016a). The city manager is also the accounting officer, which means that he/she is responsible for the entire City's reporting to national departments such as the National Treasury and the Department of Water and Sanitation (DWS). At the time of this research, the City comprised 10 line departments, 11 Groups Units and 15 MoEs. Hence, the City had up to 36 senior managers who reported to Trevor Fowler, the City Manager for Johannesburg at the time. Ndivhoniswani Lukhwareni of the DA replaced Trevor Folwer in 2016.

The City Manager and all the EMT members are classified as Section 57 managers because their contracts are prescribed in Section 57 of the Municipal Systems Act, 32 of 2000. The contracts are performance-based contract, and the managers receive bonuses for good performance. The City Manager utilises both the contract and the bonus to exercise agency in departments and entities. A former executive director in the City said that during his time, the main motivation for senior managers was a bonus, to the extent that he had a whole team of officials to gather evidence to support his performance claims (Interview: R4 – ex-executive director, Spatial Planning, 2018). At this level, the administrative systems were influenced by the ideas of New Public Management.

7.2.2 Guiding legislation

The City Manager operates in terms of a set of practices guided by legislating governing local municipalities in South Africa - in particular, by the Municipal Systems Act and the Municipal Finance Management Act (MFMA). Through the Systems Act, the City Manager is held accountable for ensuring that the City has in place all the systems demanded by law and as delineated in the constitution. In terms of the MFMA, the City Manager is held responsible for ensuring that all the financial accounting procedures are followed and ‘that the City’s annual report is produced without fail’ (Interview: R12, Director M&E, GSPCR, 2017). The City Manager signs off on the annual report, the audit report, and the budget as required by the National Treasury. The MFMA, in particular, places stringent conditions

on the use of public funds, especially around procurement. Many officials complained that the supply chain process was very tedious and delayed implementation and expenditure on projects.

At the same time, financial sustainability that ensures municipalities remain afloat is also the City Manager's responsibility. Hence, together with the Group Financial Officer, the City Manager strives to ensure that mechanisms for collecting revenue are in place and working effectively. For this reason, senior managers are incentivised with bonuses; the stakes are high on issues for which the City Manager is responsible. As one official said, 'the city cannot afford to go bust under any circumstance' (Interview: R33, Deputy Director, GSPCR).

7.2.3 Performance management – fact or fallacy

The performance management system for senior managers consists of balanced scorecards with key performance targets and indicators (KPIs). The KPIs are individually negotiated between the city manager and the senior officials. At the end of each quarter, junior officials compile evidence files for their executive directors to present to the City Manager. This means that the bulk of the work performed by lower-level officials is driven by the requirement of meeting the KPIs of senior managers. However, officials said the performance management process was more a compliance issue than measuring performance because senior manager scorecards were effectively translated to junior officials. This is how one official described what was happening with the performance assessments of senior officials:

> So for me, we are saying we have a reward system, we have a performance management system, etcetera, but we are just bluffing ourselves. It is just for compliance purposes because the Municipal Systems Act and the Municipal Finance Management Act requires you to have such a system in place. The system is supposed to achieve economic and efficient performance in the City, but it does not achieve that from where I am sitting. People do it merely because it is a requirement (Interview: R18, 2017, ex-Finance Director EISD).

However, in the 2000s, the performance system was different, as a former executive director described:

> I do not feel negative towards performance management because it was an instrument of governance. It was a mechanism to hold us [EDs] to account, and there was a mechanism to align our performance to the City's objectives. I replicated my scorecard to all the directors that reported to me. It was a very elaborate system, and a lot of the work in the City was driven by the requirement of meeting the KPIs in the performance management system (Interview: R4, ex-Executive Director, Spatial Planning, CoJ).

7.2.4 The City Manager's actor-network

The actor-network theory was an essential tool for sorting out these relationships and locating the sources of authority delegated between the City Manager and the executives. The City Manager accounted for all the business of the City. To ensure the work was performed and objectives were met, the City Manager entered into performance agreements with all the senior executives of the City and the entities. Through these contracts, the City Manager extended his influence to JW. The managing director of JW had a contract with the City Manager and was a member of the EMT, obliging the managing director to report to the City Manager. Figure 15 below.

Strategic performance objectives (SPOs)
Total weight must be a minimum of 50%

KPA No.	Key Performance Area	KPI Weighting	KPI No.	Key Performance Indicators (KPIs)	Baseline	Target	Evidence	Means of verification
2	To improve water quality by managing and protecting water resources for utilisation and ecological integrity		2.1	No. of water management units improved to a Recommended Ecological Class (REC)	New	1=Scope of work to be undertaken 2=Procument concluded 3=Part improvement in these areas 4=Advanced improvement in these areas 5=One level improvement (from class F to class E)	Completion certificate for WMUs	Overall Assessment

By signing this performance scorecard the manager and employee hereby indicate their full understanding of, and agreement with the contents of the scorecard. The manager and the employee both acknowledge that this is in full compliance with the City's Performance Management Policy.

Signed :		Signed:		Date:
CF EHLERS		TGFowler		30.06.2016

Figure 15: Part of the scorecard for the Executive Director of EISD
Source: CoJ internal document

These performance contracts are tools that the City Manager uses to supervise senior managers in the City and the entities. The City Manager, also known as the accounting officer, takes overall responsibility for the operational issues of the City and reports to national departments. The following quotes show the central role that the City Manager plays in the oversight of JW and the City in general:

> In other words, the responsibility for water services lies with the City Manager; he is the accountant officer in as far as water service delivery in the City is concerned (Interview, R13, 2016, Water Services Regulation subunit).
>
> We do water services regulation and policy development. Basically, we report to the Department of Water and Sanitation on half of the City Manager because the City Manager is the accounting officer. So we do the monitoring and the regulation and the reporting on his behalf (Interview R19, 2017, Water Services Regulation subunit).
>
> The City Manager signs this document (pointing to a quarterly report); there it is. My boss signs here, then the City Manager. When the City Manager signs, the report goes to National Treasury. The Act tells you that the city shall produce an annual report, and that is the sole responsibility of the City Manager. If the City fails to produce an annual report, National Treasury will not be talking to me, they will talk to the City Manager, and he will crack the whip! (Interview, R12, 2016, M&E, GSPCR).
>
> The executive director accounts to the City Manager, the City Manager is the sole accounting authority. So all EDs have an accounting responsibility to the City Manager (Interview, R1, 2016, Director, M&E, GSPCR).

The City Manager thus can and does influence the affairs of JW through using a set of statutorily provided norms. Where JW performs poorly, the national department reports directly to the City Manager to remedy this because JW is a City entity despite the fact that it operates independently. Through a performance contract, the managing director of JW is locked into the City Managers' actor-network. The City Manager generally wins the day, given that the ED's performance contract is negotiated with the City Manager; EDs are expected to meet specific standards and achieve certain targets measured in quantitative terms, in line with the principles of New Public Management. The officials interviewed stated that close monitoring of senior managers was the City's policy for achieving accountability and efficiency and that the City Manager plays a central role in this respect.

> The City believes that the monitoring of the City's executive management – the bosses of the City, is strongly linked to strategic performance. The assumption is that if the top three managers perform, the City can achieve its strategic objectives. So, we want the Section 57 managers to focus on the outcomes. As a result, they are monitored by us here at GSPCR, and not by the Human Resources Department (Interview: R1, GSPCR, M&E, 2017).

7.3 Group functions

Following an institutional review that the City conducted in 2011, the City introduced a Group System of governance. The City's objective in creating group functions was to reconfigure the central functions of the office of the City Manager. According to the City report on the institutional review, the City Manager's office was not historically designed to serve the entire City evenly. The entities, in particular, fell outside its ambit. Consequently, the City found inconsistencies in the application of policies and procedures, and roles and responsibilities were blurred. Group functions were envisaged as centres of excellence to provide standards, guidelines and best practice solutions to the various departments in the City administration (CoJ, 2011). Since group functions were introduced to standardise operations for all departments and entities, they because an instrument for overseeing and monitoring JW and the rest of the entities.

7.3.1 Group Strategy, Policy Coordination, and Relations (GSPCR)

GSPCR is one of the group functions in the City responsible for drafting long-term plans such as the IDP. The group has a Monitoring and Evaluation unit whose main task is to track progress on the City's IDP. The task involves collating information from the entities and compiling quarterly IDP reports for submission to the National Treasury department. Reporting is done quarterly, and the fourth-quarter report is transformed into the City's Annual Report. An official in the M&E unit of GSPCR describes his job as follows:

> We do not look at everything. As GSCPR, we deal primarily with the city's planning documents, namely the SDBIP, the IDP, and the GDS. The assessment of the annual SDBIP, which is essentially the budget linked to the IDP, and will culminate into the annual report. The SDBIP contains priorities, targets, the baseline indicators that a linked to your budget. National Treasury assesses us on these items. I am not monitoring services standards, but I am monitoring KPIs of the City, such as reducing non-revenue water, access to water in informal settlements, and so on. When National Treasury comes, they want to see whether the agreed targets are achieved, and I, here, must provide that information (Interview: R12, 2019, Director, M&E, GSPCR).

Hence, GSPCR through the M&E unit is focused on service delivery and tracking the achievement of targets set in the IDP. Essentially this means checking whether JW is 'meeting its performance targets' (Interview: R16, 2019, Director, Policy, EISD). GSPCR assesses targets for each quarter and whether or not JW is complying with the City's scorecard for the financial year (Interview, R12, 2017, Deputy Director M&E, GSPCR). As a result, GSPCR exerts a direct influence on JW as they regularly request the entity to furnish them with performance figures for each quarter. An official from JW confirmed:

> We report to the City through GSPCR because they are responsible for monitoring and evaluation. Every quarter, it is mandatory that we, as JW send a report to GSPCR and also Group Governance because they are responsible for management entities (Interview, R11, 2016, Director, MD's office Johannesburg Water).

A closer analysis showed that these different units in the City were reporting on similar issues but served different clients. For example, EISD reporting catered more for stakeholders within the City such as the mayor, the council and politicians. GSPCR and Group Governance served external stakeholders such as National Treasury in terms of statutory requirements of the Municipal Finance Management Act. For example, Section 121(1) of the Local Government: Municipal Finance Management Act 56 of 2003 (MFMA) stipulates that every municipality and the municipal entity must, for each financial year, prepare an annual report according to set guidelines. An official from the Monitoring and Evaluation Unit within the GSPCR showed how critical their role was in managing entities like JW. This official summarised the role as follows:

> We play a valuable function in the City, and we are well-positioned in the Office of the City Manager. We have a very hands-on Group Executive who will call you if he is not clear with your figures. Remember, the mayor has got a contract with the public through that IDP, and the IDP is implemented by the City Manager using his contract, i.e. the scorecard, the Service Delivery Budget Implementation Plan and the Integrated Development Plan. The mayor does not care about anything else; he just wants his numbers. He promised that he would create 20 000 jobs, and you say, Mr Mayor, we have got 30 000 jobs confirmed. That is what he wants to hear, and that is our job (Interview: R12, 2016).

GSPCR, therefore, uses statutory instruments to exert pressure on JW to report on IDP targets. For this reason, JW submits a progress report every quarter.

7.3.2 Group Governance

The Group Governance Unit is responsible for managing the City's entities through oversight and monitoring. The main task for Group Governance is to safeguard the City shareholder interest in the entity, and as a result, it focuses on legal and corporate matters related to JW. Within the City structure, Group Governance is the custodian of all the SDAs entered between the City and its entities and officials regularly attend JW quarterly board meetings to assess the performance of the company. As one official described, Group Governance is the shareholder arm of the City, which facilitates the Service Delivery Agreements the City has with the various entities, including JW (Interview: R16, 2016, Director Policy, EISD). In other words, the Group Governance Unit represents the City as the shareholder in the JW. It operates separately from both GSPCR and EISD, with its own unique relationship with JW. An official in Group Governance described the function of the unit as follows:

> Group Governance was formed as a shareholder representative in all the entities to run and manage all the corporate governance affairs on behalf of the City. This means monitoring the Service Delivery Agreement (SDA) and the Service Level Agreements. (SLA). Each entity signs an SDA and SLA, which speaks to things like response times, for example. By governance, it means that I sit in the board of directors' meetings on behalf of the City, and my job is to check if the mandate as contained in the legal instruments of the relationship governance is adhered to. I sit in all these boards, and there are no secrets that I do not know about in the entities (R20, 2019, Advocate, Group Governance).

The Group Governance Unit aims to ensure that the entities are run in terms of the Companies Act and that they remain financially viable. Hence, Group Governance directly monitors JW from a legal perspective, although it was also mentioned that they focus on service delivery targets. The following quotes show that the Group Governance Unit is an important structure in the City for exercising agency over JW to comply with statutory requirements of water services delivery:

> Group Governance monitors Joburg Water from a financial point of view. They check if Joburg Water is still a viable entity on its own. To do that, they use Service Delivery Agreements, which are standard across the City regardless of the entity. Group Governance does not ask the question as to why there is always a sewer spill at the corner of Jorissen Street; it is a question for EISD (Interview: R16, 2019, Director, Policy, EISD).

> Staff at Group Governance assess the entities and give a financial assessment opinion. Joburg Water reports to Group Governance monthly, quarterly, and ad hoc if there is a request. They sit with the City Manager, they discuss capital expenditure issues (Capex), and they discuss Operational Expenditure (Opex). And these are the things that the management of Joburg Water has discussed with the Board as the oversight structure. In the City, we use Group Governance to hold the boards accountable because the City appoints board members (Interview: R12, 2019, Director, M&E, GSPCR).

For an outsider, it is very difficult to map out how the monitoring and oversight of JW happen through Group Governance. The ethnographic approach used for this research and the Actor-Network techniques enabled me to get oriented with the City structure and to gain a better understanding of the City's governance structure which would otherwise have remained hidden. ANT was useful in tracing the connections that existed between departments, units and entities, in identifying the instruments in place that act as intermediaries, and in finding out how these are inscribed to effect agency over JW. The officials who were interviewed argued that GSPCR and Group Governance were the only two departments that reported on performance and governance issues of the entities:

> You need to be clear about what you are looking in terms of governance. If it is about reporting, quarterly reporting, planning documents of the city and all that, two people, two centres, this centre (GSPCR) and Group Governance full stop! (Interview: R12, 2019, M&E, GSPCR).

The main instrument that Group Governance uses to regulate JW is the Service Delivery Agreement (SDA). Figure 23 below shows the front page of the SDA that has been entered into between the City and JW. It is a legal document, and there are implications should a party default on any of the clauses. According to ANT, a document such as the SDA is an intermediary, a concrete and material document that connects and locks two actors into a form of coordinated practice. In other words, the SDA enrols JW into an actor-network of water service delivery. While the SDA recognises that JW as an independent institution with rights of its own, the SDA is properly inscribed such that JW is legally obligated to deliver water services as mandated by the City.

Given its legalistic inscriptions, the SDA shapes the manner in which water services are delivered in the City. Within the document, a whole section is devoted to defining the

terms used in the contract so that both parties have a common understanding of what they are committing themselves to. In ANT terms these are referred to as inscriptions; hence an SDA must be properly inscribed in order to generate an effective actor-network.

7.3.3 Group Risk and Audit

Apart from GSPCR, Group Governance, and EISD, there is another City Group Unit that exerts influence on JW, which is the Group Risk and Audit Shared Services (GRASS). GRASS's mandate is to ensure that directors and entity managers effectively identify and manage financial risks according to the City's Enterprise Risk Management Framework (COJ, 2015). JW together with City Power is closely monitored from this perspective because these entities are considered to be the City's two cash cows given the significant contribution they make to the City's revenue (Interview: R16, 2016, Director Policy, EISD). For example, in 2018, service charges for water and sanitation, electricity and waste contributed 53 per cent of the City's revenue, and JW alone contributed 38 per cent of the total service charges. Consequently, the City's financial model is framed around revenue generation and focused on these two entities:

> City Power and Joburg Water are the City's two cash cows. Suppose the City requires them to do any innovation or sustainability practices that may result in a revenue adjustment, especially downwards. In that case, the companies get very wary, and our own Budget Office gets nervous because currently, the City's financial model is based on revenue collection from these two major entities. So, anything that may cause a drop in revenue is seriously frowned upon (Interview: R16, 2016, EISD).

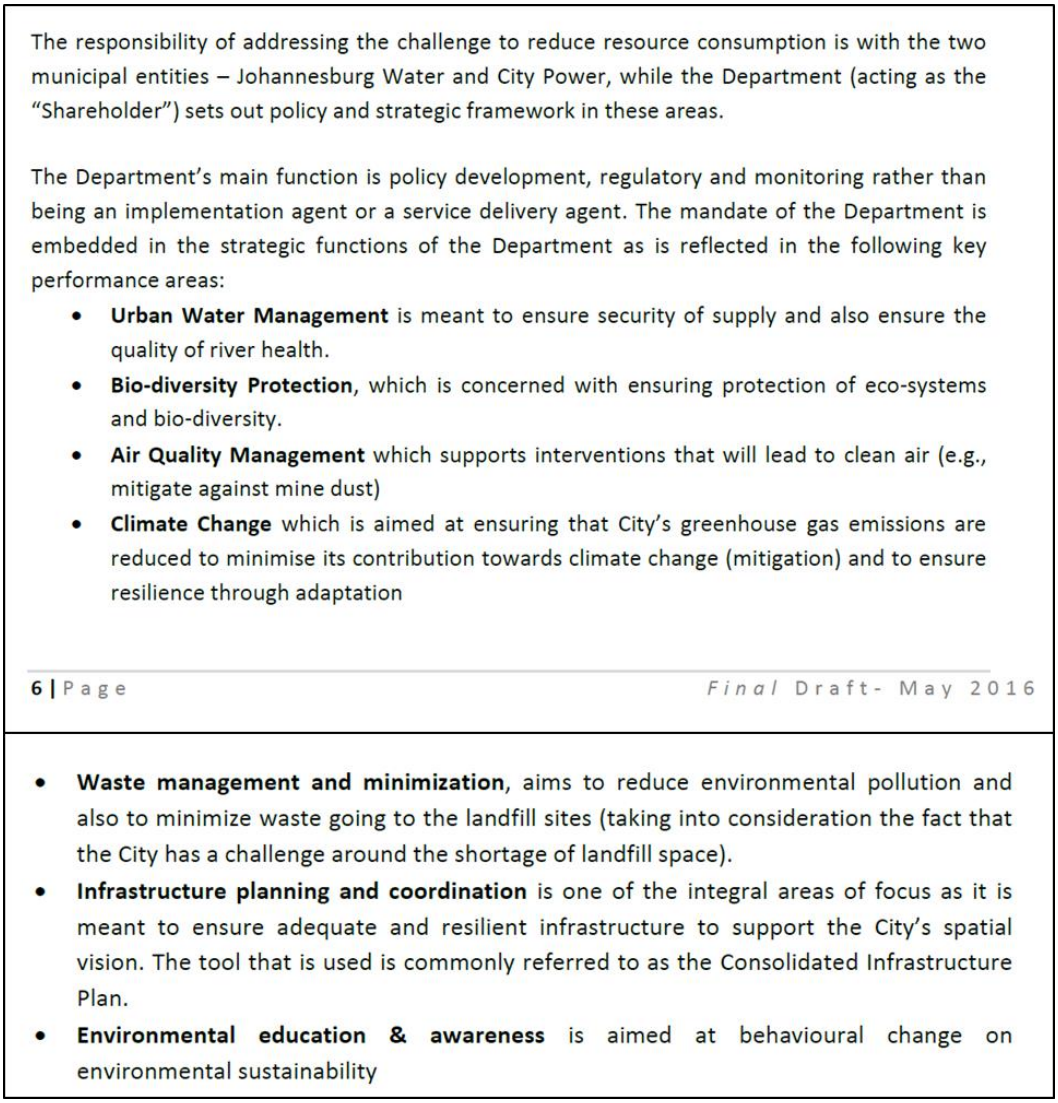
Through GRASS Group Governance, the City aims to ensure that it remains financially stable and earns shareholder dividends from JW. This means that the financial requirements of cost recovery and profits are not the sole concern of the board of directors but the City as well.

7.4 Line Departments and policy regulation of JW

We saw earlier that EISD came into existence following the institutional review of 2011. It was in this department that I conducted my ethnographic fieldwork.

7.4.1 The Environment and Infrastructure Services Department (EISD)

The primary function of EISD is oversight and regulation of the City's three service delivery entities namely JW, City Power, and Pikitup (CoJ, 2016a). The role of oversight in public institutions is critical from a public accountability perspective and is the hallmark of modern democratic governance (Bovens, 2005). While there are several actors involved in water services governance, EISD is tasked with developing policies related to water services through research and monitoring. In the Department's Business Plan document, the responsibility of EISD is captured as illustrated in Figure 16 below:



The responsibility of addressing the challenge to reduce resource consumption is with the two municipal entities – Johannesburg Water and City Power, while the Department (acting as the "Shareholder") sets out policy and strategic framework in these areas.

The Department's main function is policy development, regulatory and monitoring rather than being an implementation agent or a service delivery agent. The mandate of the Department is embedded in the strategic functions of the Department as is reflected in the following key performance areas:

- **Urban Water Management** is meant to ensure security of supply and also ensure the quality of river health.
- **Bio-diversity Protection**, which is concerned with ensuring protection of eco-systems and bio-diversity.
- **Air Quality Management** which supports interventions that will lead to clean air (e.g., mitigate against mine dust)
- **Climate Change** which is aimed at ensuring that City's greenhouse gas emissions are reduced to minimise its contribution towards climate change (mitigation) and to ensure resilience through adaptation

6 | Page *Final* Draft- May 2016

- **Waste management and minimization**, aims to reduce environmental pollution and also to minimize waste going to the landfill sites (taking into consideration the fact that the City has a challenge around the shortage of landfill space).
- **Infrastructure planning and coordination** is one of the integral areas of focus as it is meant to ensure adequate and resilient infrastructure to support the City's spatial vision. The tool that is used is commonly referred to as the Consolidated Infrastructure Plan.
- **Environmental education & awareness** is aimed at behavioural change on environmental sustainability

Figure 16: The Mandate of EISD in relation to water services in the City
Source: ESID Business Plan, 2016

EISD's oversight activities included verifying commitments relating to service delivery, ensuring municipal entities comply with norms and standards of service delivery, and ensuring that the City's bylaws are adhered to (CoJ, 2016a). The department uses several instruments to perform its oversight function over JW, such as the Water Service Act, National Water Services Regulation Strategy (NWSRS), and the Service Delivery Agreement (SDA). The Water Services Act, in particular, contains regulations for guiding the City in its oversight function (Interview: R9, 2014; R16 and R13, 2016). These policy documents and contracts are the intermediaries that the City uses to translate policy into action through JW. Based on my research, three officials within EISD emerged as critical in the relationship between this department and JW. These are the executive director, the Water and Biodiversity Unit Director, and the Deputy Director for the Water Services and Policy Regulation subunit.

7.4.2 The Executive Director

In Section 7.3, it was noted that executive directors of the line department in the City are part of the EMT and report directly to the City Manager. They are employed on 5-year performance-based contracts in terms of Section 57 of the Municipal Systems Act of 2000. These contracts are publicly available on the City's website to increase transparency and accountability (Clause 11.1 of Contract). The contract is an essential intermediary for translating the City's objectives to the department's environment and infrastructure. While the City commits to ensuring a conducive environment that guarantees performance (Clauses, 7.1-7.5), the Section 57 manager is expected to meet specific performance standards and achieve certain targets. The specification of performance standards, measures of performance, goals, targets and indicators of success, mostly in quantitative terms using a scorecard, is typical of New Public Management (Hood, 1991). However, as observed during fieldwork, only the executive director has a closely monitored scorecard with the City Manager. The City believed that monitoring senior managers would improve the performance of the entire organisation, as one official reported:

> The City believes that the monitoring of the City's executive management – the City's bosses, we call them 'Section 57 employees' – is strongly linked to strategic performance.

> The assumption is that if the top managers perform, the City can achieve its strategic objectives. So, we want the Section 57 managers to focus on the outcomes of service delivery. Therefore they are monitored by us here at GSPCR and not by the Human Resources Department (Interview: R1, 2017, M&E, GSCPR).

This conception by the City was derived from the White Paper on Local Government of 1998, which states that management reform measures include (but are not limited to) the introduction of performance-based contracts for senior staff. Performance-based contracts can improve accountability and induce a focus on outputs (RSA, 1998 unpaginated). Based on the White Paper, the City uses executive directors as conduits for delivering City objectives because much of the work in the City is driven by the requirement of meeting the Key Performance Indicators in the performance management system of senior officials (Interview, R4, 2018). The performance contracts are negotiated between the executives and the City Manager, and according to an ex-executive director, the motivation is the performance bonuses (Interview, R4, 2018). Although important as an instrument of governance, the performance management of executive directors had difficulties that directly impacted City performance. For example, skilled managers were known to negotiate performance targets that were easy to achieve (Interviews, R17, 2018; R4, 2018). The second is the rigidity of the system, as one ex-official explained:

> But the constraint was that you were tied to one year contracts and circumstances change rapidly in the City, and it is quite challenging to adapt to new circumstances when your actions are circumscribed within a performance management contract. You have some space for adaptation, but essentially, you are constrained by the fact that you have to meet the targets in your performance contract (Interview, R4, 2018, ex-ED, Spatial Planning, CoJ).

A closer look at the Executive Director's scorecard revealed that although JW was monitored through EISD in terms of water services, the Executive Director's scorecard contains very few KPIs related to the supply of water communities in the Service Delivery Agreement document. When I inquired further about this, I was informed that monitoring the SDA was the function of Group Governance, which is a separate unit outside of EISD. An analysis of the scorecards of the executive directors for EISD, GSPCR, Group Governance, and Group Risk shows that multiple parties were involved in the oversight of JW and nearly all of them conducted site inspections of JW projects. With multiple

parties involved, City objectives tended to become lost in the translation process. The splitting of work packages also resulted in a production paradox where management responsibilities were blurred, individual relationships fragmented and there was duplication of effort and loss of accountability (Gregory, 1995). City officials acknowledged this problem but argued that it was caused by too many regulatory instruments in the National Treasury, which required municipalities to report, causing reporting burdens. Officials also argued that the City's municipal entity model was very complicated because it forced the City to assume conflictual roles of both player and referee at the same time (Interview, R17, 2018).

7.5 Director of Water Resources

Below the Executive Director for EISD sat the Director of the Water Resources and Biodiversity Unit. This unit was one of five that made up EISD. At the time of the research, the post was vacant, and deputy directors of sub-units within WR&B were taking turns to serve as Unit Directors on a six-month rotation basis. Officials argued that the post was politically sensitive, and no one willingly occupied it. The post involved responsibility for compiling performance information of the entity and reporting this to the Executive Director and the MMC (Interview: R9, 2014). That the post remained vacant was a major weakness in the actor-network which regulated JW because the incumbent was not keen on taking binding decisions. Officials interviewed noted that because of this situation many important issues relating to water service delivery were getting lost.

> I am an old induna here, and I will just say that you can hide many things behind reporting, get your numbers right, keep your eye on the ball, and the other seven things they are not looking at can fall off the wagon. The Water Services Development plan is like the City's manifesto for water services. How much, where, what its standards are, what the timeframes are, what its coverage is, how it is doing, and how it will get from here to its end goal? The National Department of Water Affairs reduced the requirements for the WSDP into an Excel sheet, and now it is just a numbers game. Real debates about outcomes of water service delivery are no longer happening (Interview: R2, 2017 Open Space Planning).

7.5.1 Deputy Director and the regulation of JW

The Water Resources and Biodiversity Unit of EISD comprise four sub-units, each looking at specific aspects of water and each having a relationship with JW. One of these is the

Water Services Regulation and Policy Development sub-unit (WSR&PD). The greater part of my fieldwork was spent with officials in this sub-unit, which was manned, by three officials, namely a Deputy Director (who was the head) and two subordinates known as Principal Specialists. These three officials agreed that their main task was the regulation of water services. This implies interacting with JW directly to ensure that the entity fulfils all the regulatory requirements regarding water services. One official described how this process was carried out:

> Now, how do we then regulate? We regulate within the context of strategic water services. We put out the KPIs, and from that, we monitor Joburg Water based on those KPIs. So why do we have those KPIs? We are expected to comply with the national department. So we have got this, and from that, we have got the KPIs, essential services, we have got water demand, we have got response time, we have got asset management and all the business of Joburg Water that you need to regulate. So how do we do it? So from a strategic point of view, when they plan, when they do business plans, we are part of it so that at least we are informed, and every quarter we give support to the MMC. (R13, 2016).

In order to reconcile what the official was attempting to explain, I consulted the EISD's Business Plan document to find out how this regulatory function was meant to be performed. The department drew its regulatory role over JW from the Water Services Act (RSA, 1997), as administered by the national Department of Water and Sanitation (DWS), and stated that one of the roles of the Water Services Authority (here, City of Johannesburg) was to "ensure access to basic water services". According to officials, this means, in particular, services to informal settlements. In the City, it is the deputy director for WSR&PD who is responsible for "Access to Basic Services" and "Water and Water Use Efficiency". There were no corresponding equivalents upon which senior managers could be held responsible. It is strange that these KPIs were found at this (rather low) level of the bureaucracy. Whether this was deliberate or an oversight, could not be established, but it was clear that there were other instances of policy gaps where the policy objective of equity was underplayed. This was also an indication of how dysfunctional the performance management system was in the City.

Continuing to track how the City of Johannesburg monitors the equity objective of water provision through the regulation of JW, I looked for the Deputy Director's instruments to

perform her task. In performing her regulatory function, she relied on JW quarterly reports from which she prepared an assessment report for the ED. Figure 17 below shows part of the assessment report produced by the WSR&PD deputy director.

Measurement	Annual target	Quarterly Target	Actual		Comments
Access to services: Basic Water provision to Informal Settlements	83.89% coverage (2,290 households)	Q1 = 82.64%. Q2 = Q3 = Q4 =	0		***Performance*** In this quarter no households were provided with basic water, Joburg water reported that procurement process is underway.; The tender is anticipated to be advertised in October 2017. ***Regulatory standard*** SFWS requires everyone to have access to a basic water supply by 2008. The City did not achieve this target. ***Evidence*** Report on site visit that was undertaken.
Access to services: Basic Sanitation services to Informal Settlements	39.27% coverage (2,240households)	Q1= 38.05% coverage Q2= Q3= Q4=	0		***Performance*** In this quarter, no households were provided access to basic sanitation as per plan. Again this is due to procurement process that is not concluded yet. It is reported that the tender is anticipated to be advertised in October 2017. ***Regulatory standard compliance:*** DWS requires 100 % provision of basic services which is impossible to achieve. Whilst the Ventilated Pit latrines must have air ventilation and be sealed inside the pit if built in high water table. Joburg Water conformed to this standard. ***Evidence*** Site visits undertaken
Overall Assessment: **1. Basic Water Services Provision to Informal Settlements** No households were provided with basic water and sanitation in the quarter under review					

Figure 17: Part of an assessment report submitted to ED for EISD
Source: CoJ Internal documents 2017 Quarter 1, 2017

The overall assessment in this particular 2017 report, was that no additional households living in informal settlements were provided with basic water and sanitation in the quarter under review. There was no evidence to show that the officials at this lower level had an obligation to ensure that JW delivers water, nor could they be held responsible for the low performance of the entity in the area. One official, actually said she did want to be held responsible for the performance of JW. While that sounded like a fare assertion, it was not clear what mechanism was in place to ensure that JW actually performs. The performance management system used for seniors was not effectively implemented with lower-level officials. In fact, the performance management system collapsed at this level after the City decided to remove monetary rewards for good performance. As a result, the deputy was not concerned about how JW performed; she could not be held responsible and she knew that she would neither be rewarded nor sanctioned if things did not change.

However, it seems that the situation was not so in the past and the approach of the person occupying this office mattered as shown from the quotes below by officials who have previously held this position:

> When I am acting, I don't just take the report as given. I scrutinise the report and ask hard questions on why performance is at a certain level. For example, JW can report 95% performance in sanitation and yet we know that there are sewer spills that are happening. So let's say there is a breakdown of the pump station in the north and we are getting sewer spills. In the old days, we would just go ourselves to Joburg Water and say you are polluting the environment. This has to be remedied. What are you doing? We would go and sit with their CAPEX department; we would go and harass their Operations department (Interview: R2, Deputy Director, WR&B, 2017).

The role of the deputy director has been reduced to one of mere administration and pushing papers. If the portfolio committees do not pick up these issues, challenges in the provision of basic services will remain unresolved. The discussion about the deputy director seemed to sum up what looked like a gloomy picture of water services regulation. Indeed, the City regulatory and oversight role performed in various ways by various actors is not as effective as it should be. The very weak way of addressing service delivery problems in the most precarious areas - informal settlements - is indicative of the limited importance that equity targets exert as a driving objective of official performance.

7.6 Governance practices of officials

This section summarises the various governance practices that City officials engage in as they attempt to exercise agency over JW. It is important to reiterate that the monitoring and oversight role of JW is spread across numerous parties, and this chapter focused on those that fall within the City administration. Various actors engage in a variety of governance practices, some of which have been mentioned in preceding sections.

7.6.1 Formulating service delivery agreements

The formulation of SDAs is a crucial practice used by the City to oversee, regulate, and monitor JW. Each party to the agreement commits to fulfilling its obligation in the agreement. The Service Delivery Agreement (SDA) is the main instrument that binds JW to meet service level standards and obliges the entity to submit quarterly reports on

progress according to the statutory requirement of the SDA. The SDA is a legal document in which the defaulting party may be brought before a court of law (See Figure 23 above). The SDA is also standard across the different entities of the City.

7.6.2 Assessing reports

The assessment of Quarterly Reports from entities is routine practice for officials in EISD. They go through the report, identify, and flag issues that they think should be escalated to the Executive Director and the MMC. An analysis of the JW report showed that it contained three major sections which entity reports on (i) progress towards IDP service delivery targets, (ii) shareholder and governance-related issues, and (iii) policy compliance issues. Within the City, these three areas a dealt with by three different units namely GSPCR, Group Governance, and EISD respectively. Hence, officials in the EISD's WSR&PD sub-unit only assess the part of the JW report that speaks to policy compliance issues related to water services. One official in the subunit described the process in this way:

> I analyse the report, pick the main issues, and then I compile an assessment report for the MMC. I conduct my own assessment of the report and give an independent opinion to the Executive Director and them the MMC (Interview: R16, Deputy Director, Water Services).

Based on interviews it seems that this process was much more rigorous in the early days of JW than at the time of research. One ex-official spoke on how she used to engage with official at JW on matter related to water and sanitation:

> I used to scrutinise the reports, every detail and even query issues in the report with Johannesburg Water. I would phone the Managing Director or even sit with him and show him the gaps in delivery and the issues that Johannesburg Water was ignoring. My boss liked me because I was very thorough in making sure that Johannesburg Water explains what they are doing, and I would go out and see for myself. However, some politicians and board members did not like me because they would suddenly appear as if they were not doing anything (Interview: R23, 2020, ex-official, CMU/Infrastructure Services).

The practical norms literature has shown that there is always an inconsistency between what officials ought to do and what they actually do. Several officials in the City

acknowledged that work processes are no longer as intense as they were in the past (Interview: R2, Deputy Director, WRandB, 2017).

7.6.3 Site visits to projects sites

In addition to desktop assessments of JW quarterly reports, the City official also claimed that they undertake site visits to verify some of the issues raised in the reports. During these site visits, officials assess the extent to which communities are satisfied with the service they are getting from the City. The M&E unit, in particular, championed the idea of undertaking evaluations of projects that the entities were implementing. A former Director for M&E in GSPCR described the practice as follows:

> If they send us information, the report, our team will go on the ground and do the verification processes. So as part of the monitoring exercise, the team would go onto the field number (1) to determine whether the reported performance has actually transpired, (2) to determine any challenges with programme implementation, Our aim is that we need to report to EMT that these are the challenges that we have established and this is the action plan we are proposing going forward (Interview: R1, 2016, Director, M&E, GSPCR)

> In terms of Joburg Water, we do oversight where we do site visits and checking the progress of their projects, checking what they are reporting against what is happening on the ground, monitoring expenditure, and so forth (Interview, R19, 2017, Principal Specialist Water Services Regulation).

Based on ethnographic experience, there was very little to discern on how these site visits were utilised to improve regulation other than it being a routine exercise that officials have to do.

7.6.4 Defining services levels

Defining levels of service that residents receive through the entity is an important practice the officials engage in. However, based on this research, officials said that discussions and debates over service delivery levels are no longer happening as they did in the past. The City provides services to residents based on particular standards specified in the SDA and are sometimes published as bylaws for the City. However, this research found out that the City Sanitation Policy was outdated and had not been reviewed during the

last twenty years. A senior official stated that the acceptable standard of service is not clear:

> What is acceptable? That is a good question, but I do not know if there was ever such research done on that. We have the Service Level Agreements, which were adopted about six or seven years ago. They are very strict on targets, and I do not always think that the agencies and entities achieve those timelines or response times. For example, waste is probably a good one, wherein the inner city, the service level standard is that it should be operating at Level 1 cleanliness, which means that there is no paper, no littering, nothing, but you could probably get the picture yourself of what is in the CDB, there is litter everywhere (Interview, R16, 2017, Director Policy, EISD).

> You see, they do not argue; they touch the tip of the surface. So, my view is that no one in the City is looking precisely at the debates on service levels (Interview, R2, 2016, Director Open Space Planning).

Determining levels of service and pricing is an issue with a long-standing history in South Africa. A former official in the City's Strategy Unit in the 2000s explains that an important document was drafted around 1990-92 by the City of Port Elizabeth[13] on municipal rates accounts. He argued that:

> There is a little bit of institutional history around how the water supply chain works in this country. What was the process by which it was decided, and how did it end up that we have that particular way of thinking about water? Part of the story is about the role that the national government plays and how water boards are established. Part of understanding the municipal government responsibilities is about understanding the roles and functions of these other entities (Interview: R26 – ex-Director, Central Strategy, CoJ).

Again, practical norms literature points to how certain norms and practices fade away over time.

7.6.5 Networking and forging relationships

Given the vast size of the City administration of over 30 000 staff, officials hardly know each other, even at senior levels. Coordination between departments are difficult, and a silo mentality is perpetuated, resulting in duplication of effort. The City developed several mechanisms to encourage departments to work together, and one such was the Cluster system (See Chapter 6). The cluster system placed various City departments and entities

[13] A city in the Eastern Cape province of South Africa. This document was not available for analysis.

into four clusters, and these met regularly. The officials agreed that cluster meetings improved relations among departments, units and entities as officials knew each other and forged relationships. These relationships facilitated ease of interaction, and one official maintained that “the cluster system has worked wonders” (Interview: R16, 2016, Director Policy Coordination, EISD).

> There is another layer, which we call the clusters comprising of various departments and entities, and in the City, there are four clusters. This is more of an institutional arrangement than really a decision-making and accountability mechanism, and it really came about after the GDS was developed in 2012. We, as EISD, belong to the sustainable services cluster.

While the cluster system is not a legal requirement, officials found it a very useful governance mechanism that fostered interdepartmental coordination. Former mayor Parks Tau was very particular about clusters and expected the cluster plans to display synergy between units, departments, and entities - as this official described:

> When we present our business plans, the Mayor wants to see that both in the transport section and the water section are now speaking to each other. To achieve [this], he set up Cluster Task Teams, and they hold cluster meetings monthly that ensure that integration happens. Actually, the Mayor set up these clusters after the GDS to force us to work together as departments. If you present your submission to the mayor and other departments have not seen it, he does not consider it. It is rejected immediately, so it forces us actually to work together. You know officials, we are not good at that (Interview, R9, 2014 ex-Director, Water Services, CoJ).

Officials acknowledged that the City administration was extensive and complex and that it was difficult to know everyone, let alone develop working relationships. Apart from understanding how this complex system worked, officials needed to develop informal networks to get work done. While scorecards were good governance instruments in that they specified achievement targets, they were not adequately designed to ensure that departments, units, and individuals worked in an integrated way. Creating networks and forging relationships was one solution:

> The governance model is problematic, but in terms of our day-to-day use of the system, the way we get around it is that we forge relationships. That is the biggest way that you fix the system. You get to know who is whom in the zoo, and you make relationships with them, and you work directly with those people. So you almost bypass the system, and you go straight to the individuals. That is really how the system works; you make sure you

> know the people that matter very well (Interview: R2, 2017, Deputy Director, Open Space Planning).

> Getting your job done or your service delivery done is all about networking and relationship building. It is not because Darlington has his scorecard, and he knows that he must provide water. No, it is about having a cup of coffee with Darlington and talk about projects related issues of mutual benefit. You cannot sit in your office and think that if you drop an email, the next person will follow up on that email and deliver on your request. You need to have a social relationship and know Darlington by face and call him to follow up on an email (Interview: R16, 2016, Director, Policy, EISD).

It was also necessary to maintain these relationships and to avoid tension. Officials noted that it was difficult to purely depend on the system because the system was too straight-jacketed. For example, the executive director could report the managing director of Johannesburg Water to the City Manager if pipe bursts were not attended to within 72 hours. The City Manager was then expected to reprimand the managing director. However, an official said that such an action would strain relationships and jeopardise future collaboration between the Managing Director and the Executive Director. In order to avoid friction, the ED would act diplomatically to ensure the issue was addressed outside the official lines of authority.

7.6.6 Collecting reports from JW

Another regular practice by officials is collecting reports and data from JW. While JW submits a report every quarter, officials from various units approach JW directly, demanding data for their own purposes and in their own format. JW officials blamed the City for working in silos, but on close inspection, it was clear that the local governance field was broad and complex and stretched way beyond the municipality. Although ethnographic methods were used, it was very difficult to generate a definitive description of the structure. I wrote in my field notes:

> There seem to be so many parties involved in water services regulation, it is not easy to see or know exactly where to draw the line. Identifying who is ultimately is responsible seems difficult to tell. R13 says they assess the Johannesburg Water reports and give an independent opinion. Does that mean that whatever the City gets to know about the activities of JW depends on the opinion of this one person? (Field notes, 2017).

The explanation for this difficulty was that the City administration evolved over time; new units were created and others were phased out or transformed into new ones. Yet others

were not necessarily removed but remained in place with little or no influence resulting in the problem of sedimentation described by Bierschenk and Olivier de Sardan (2012).

7.6.7 Policy development

Officials in EISD's Water Unit argued that they were not responsible for service levels or standards, and it took some time to shed light on this area. Officials in the WSR&PD argued that their role was policy development, and it was very easy to be misled because on the City's organogram, JW falls under EISD. However, the research found that the task of EISD through this unit was to develop policy based on research, which could inform the bylaws that JW is obliged to implement. This role sometimes caused problems for officials, especially during mayor Park Tau's term - as one official described:

> Because we are a policy department, a lot of our work entails writing documents, policies, and things like that. However, because we are in the year of elections, the Mayor does not want to see documents in our business plan. He says, 'what are you going to achieve with a document?' It is difficult to explain because that is our function as a department; we are not an operational department; we are more of a policy department. Normally we go and present our Business Plans, together with the entities, so imagine us coming and saying we are going to produce this document and that document whatever, and the entities say we are going to deliver so many toilets, it looks a whole lot better. So the Mayor will say go back and rethink and come up with better indicators or targets. This is challenging (Interview: R9, ex-Director Water Services, CoJ).

Related to policy development is the externalisation of policy formulation processes. This is common practice in government. However, the research showed that the government loses money through this practice because consultants deliver substandard work. During fieldwork, I sat in on a meeting where a consultant was reporting back, and I wrote these notes afterwards:

> After two hours of presentation in which the consultant was merely reading his PowerPoint presentation, R16 stopped the proceedings. Everybody, including myself, felt that the consultant had not done a proper job. The tendency to outsource such important work to people with little public interest seems to be the primary reason why public officials fail to implement policy effectively; they do not own the policy. As a result, officials have very little time to reflect on the practicality of the policy solutions they are proposing (Field notes, 2017)

By externalising the policy formulation process, the City was placing debates about service delivery in the realm of people with very little interest in the public good. However, the practice is common due to a lack of capacity and internal expertise.

7.6.8 Sending reports to other parts of the network

The City comprises a vast network of departments, units and people, and reports from the entities follow the structure of this network. The experience I had in the City was that reports from the entities are distributed across the entire network. Officials undertake assessments of reports on behalf of the senior managers who often have very little time to read the reports. Senior officials thus depend on their subordinates for information because it is a standard procedure that these internal abridged reports be generated.

However, Section 79 portfolio committees also received these reports because they are an oversight structure. Although they do not make decisions, they scrutinise the reports and demand additional information if necessary before making recommendations to the mayoral committee and council. Since they do not make decisions, the portfolio committees are weak instruments of oversight because the mayoral committee may either accept or ignore their recommendations. Opposition parties can serve as essential watchdogs of service delivery. They in turn have little or no power to influence service delivery or JW because the mayoral committee that makes decisions can bypass the portfolio committee on certain issues and take decisions on matters before the portfolio committees have deliberated on them. One official said that the portfolio only receives the report when a decision had already been made by the mayoral committee (Interview: R2, Deputy Director, Open Space Planning, 2017).

As discussed earlier, much reporting goes on in the City both administratively and politically. However, officials' accounts show that this burden weighs heavily on the entities involved in service delivery, such as Pikitup, Johannesburg Water, and City Power. Although reporting keeps the entire actor-network functional and informed, it is burdensome for officials both in the City and at JW given the extent of reporting. Table 12 below shows the frequency of reporting that units have to undertake as required by law and the National Treasury. The number of indicators is vast and it requires considerable effort to collate the relevant data.

Table 11: Types of reports and reporting frequency

Entity	Report	Frequency
Johannesburg Water	Quarterly Report	Quarterly
EISD	Performance Assessment	Quarterly
	Cluster Report	Quarterly
	Visible Service Delivery	Monthly
	Section 79 report	Quarterly
Water Service Unit	MUSSA	Annually
	Blue Drop	Annually
	Green Drop	Annually
	Water Services Assessment report	Quarterly
GSPCR	IDP Tracking Report	Quarterly
	Annual report	Annually
	M&E report	Quarterly
Group Governance	Governance Report	Quarterly
Group Risk	Risk report	Quarterly
Group Finance	Budget reports	Quarterly

Source: Author based on CoJ Reporting documents

The burden lays heavily on JW, who complained there is just too much reporting required, as the following quotes from officials show:

> The City is required to report by the Department of Water Affairs, but Water Affairs will not speak to us, they will channel to City to implement, and we are the ones to do that implementation. They will send that to us, and we, as Joburg Water, have to report to them in whatever format they require. Therefore, it is quite tedious in the sense that there is just a lot of reporting on the same things over and over again (Interview, R11, 2016, Director, MD's office Johannesburg Water).

> You see another thing Joburg Water complains about in the quarterly reporting. They have got so many direct reportings, they need to report to the board, they report to the department, they report to the mayor, they report to the City Manager, and that is unfortunately because of the setup (Interview: R16, 2016, Director Policy, EISD).

> Joburg Water got so sick of the City just calling for data that there was sort of an agreement that if you call for data, you must go to R13. You cannot just have fifty people phoning me every day for different data; they complained about that because they say you ask us to report in one form here and then another from there, and everyone just wants our data. Every day we have to generate data for a new template or new way of reporting (Interview: R2, Deputy Director, Open Space Planning).

Indicators and reporting is a typical element in New Public Management which the national government through the National Treasury is trying to enforce in municipalities. One official interviewed argued that the national government is emphasising systems to be put in place and then efficiently followed. However, as these quotes show, there is a burden of reporting on municipalities and entities.

7.6.9 The Business planning process

Business planning is a routine process in which officials are involved in influencing JW in terms of service delivery. This process culminates in a document known as the Business Plan, which is essentially a strategy document on how the EISD and JW will achieve service delivery objectives. There are clauses in the Business Plan that JW is bound to meet. Figure 18 is an extract from the EISD Business Plan, showing the water-related KPIs (CoJ, 2016a:p.38). The focus is on water security and is a task to be fulfilled more by the City than JW.

Key Priority: **Preserving our natural resources (PiP #9)**							
Long term impact (Joburg 2040 related output): **Climate change resilience and environmental protection**							
IDP programme	**Key Performance Indicator (2020/21)**	**Projects/ Interventions**	**Target (2021/22)**	**Baseline (2011/16)**	**Target 2016/17 financial year**	**Target 2017/18 financial year**	**Target 2018/1 financi year**
Water demand-side management	**1** %Review and Implementation of the approved sanitation policy which will include grey water use	Stakeholder engagement Communication & awareness	100% Implementation of the approved sanitation policy	Sanitation policy of 2002	New target	Phase one still to be completed	100% review of sanitatio policy
	2 Number of boreholes drilled across the City for alternative water source	Stakeholder engagement Communication & awareness	43 number of boreholes drilled across the City	New target	9 boreholes drilled	11 boreholes to be drilled	4 boreho to be drill

Figure 18: Extract from the EISD Business Plan
EISD Business Plan document, CoJ, 2016a

Compared to the SDA, the Business plan is merely a guiding document, whereas the SDA is legally binding. However, it is critical to ensure that entities do not go off on a tangent but take up on what the City considers service delivery priorities for the year.

During business, planning meetings a lot of interessment takes place as officials attempt to reach a consensus on delivery issues. Once an obligatory passage point is reached, which in ANT terms is a point of agreement, the plan is concluded. JW has been known to put forward disclaimers about budgets as shown in this quote:

> We have a business planning process. Every year around July/August, we have breakaway planning sessions with the MoEs, Joburg Water, City Power and Pikitup. During these sessions, we as the City present the City's priorities to the entities and say, 'these are things we would like you to include within your business planning process'. It is not to say that they will always accept it. It is always a fight. Normally, these planning sessions involve the executive management, so it is the MD, the CEO, and all the executive managers. We normally break away for two/three-day sessions where we discuss past progress in terms of projects, the challenges, what we did not achieve, why we did not achieve it, and so on. So it is really going into detail and saying how are we going to improve on that and link it to the city's priorities? (Interview: R14, 2014, ex-Director Water Services, EISD).

Hence, many good plans have been crafted over, but as officials in the City noted, budgets always limit how much the City or entity can do to facilitate service delivery. The Business Plan, for example, is based on the City's priorities as defined in the GDS, selected, and emphasized by the Mayor. EISD undertakes to regulate, ensure compliance and monitor policy related to water services and other programmes within its portfolio.

7.6.10 Ensuring compliance with bylaws

The City also uses bylaws as instruments of governance in the water sector. These bylaws are drafted, implemented and enforced through EISD and enforced by the City's Police Department, known as the Johannesburg Metropolitan Police Department (JMPD). However, JMPD is not part of EISD and does not participate in the formulation of the bylaws, hence officials in EISD do not have ultimate control over enforcement of the laws. My experience during fieldwork was that these bylaws are not up to date, and as a result, they are ineffective as instruments of control. This results indicate that as of 2017, the City was using outdated bylaws drafted in 2001. I recorded this in my field notes:

> The City has, through EISD, contracted a private legal firm to review the existing bylaws and generate a report. A meeting was organised in which the consultant was to present his findings to a team of officials from both the EISD Water Unit and Johannesburg Water. First, everyone noted that it was a shameful thing that the City's water services bylaws

had not been reviewed during the last twenty years. Consequently, the existing bylaws were not aligned to national legislation nor the current challenges that the City was facing.

7.7 Exerting influence and challenges

As noted in the preceding section, there are several channels through which agency is exerted. Firstly, there is the IDP planning process involving both the executive and political arms of the City. The IDP document is agreed upon by all parties and serves as the basis for assessing progress both for the City at large and the entities in particular. Secondly, at the departmental level, officials in the sub-units of EISD ensure that JW has developed business plans and that these plans consider the City's priorities. Thirdly, the IDP is narrowed down to an annual plan to which a budget is attached, culminating in an SDBIP. Based on the SDBIP, the City expects JW to report on progress quarterly, and since this is legal, JW sends the reports to the City where they get distributed to the various parties for assessment or endorsement. Looking at the role of EISD and its units and ensuring that JW fulfils its mandate from a policy perspective, is how the officials perceived the regulatory and oversight role. This role is performed in terms of the norms and standards in the Municipal Services Act. This means that officials have the backing of the law to exercise agency over JW. This is how officials described the oversight role:

> We play a local regulation role over Joburg Water, so we have an oversight role in ensuring that the services are delivered as per the norms and standards in the Municipal Services Act. We have an oversight role in ensuring that the entities meet their business plan targets and advise or support them where they need funding or specialised input or just to get by. As the oversight department, we need to ensure that the entity takes up those objectives into their day to day business, and so we inform their business planning process to ensure that the city's goals are achieved (Interview: R9, ex-Director for Water Service, EISD).

> In terms of Joburg Water, we do oversight where we do site visits and check the progress of their projects, checking what they are reporting against what is happening on the ground, monitoring expenditure, and so forth (Interview, R19, 2017, Principal Specialist Water Services Regulation).

> Ideally, Johannesburg Water should report to the MMC, who is the political head but we provide that support to the MMC in terms of the oversight of the City's function as a shareholder play (Interview, R16, 2016. Director, Policy, EISD).

7.7.1 The Joint Operations Committee (JOC)

Another initiative by the City to improve service delivery was creating the Joint Operations Committee (JOC). None of the officials in EISD mentioned anything about the existence of JOC, even though it was a weekly event in which all the managing directors of entities, regional directors, executive directors and group heads meet on Wednesdays to report on progress in the service delivery front - as some official described:

> JOC happens every Wednesday from 7 am without fail. We can use JOC to respond to customer queries that come via the customer call centre. It is a very tight 7 a.m. everyone should be seated, and it is a good thing we are paid to deliver services (Interview R33 – ex-Deputy Director, Data and Strategic Information, GSPCR).

> JOC is still there, and the Mayor is driving it; all regional directors come and report. It is a powerful structure that discusses the day to day responses to service delivery. JOC is like your engine room. However, since JOC is not a formal structure, there is no one directly responsible for making sure that issues discussed are carried forward: (Interview: R12 – Deputy Director M&E, GSPCR).

> So these things often we discuss them, and we agree, but who is accountable? Who is the head of JOC? Is it the Director? So as soon as we get out of the meeting with JOC, I am worried about my strategic information research; no one sees it. I get worried every Wednesday when we are meeting; what is the outcome? You know, so we also do appreciate that it is a new structure to deal with, service delivery, so we have given it is time, it has been there for almost two years now, so we are at a point when we, let us evaluate in order to see if we can make it work better (Interview R33 – ex-Deputy Director, Data and Strategic Information, GSPCR).

Another problem that the officials noted in the JOC was that representation from the departments and entities changed every week because it was not a formal structure. A similar problem happens at Cluster meetings, where attendance changes and officials without decision-making powers represent their divisions.

> Entities were sending low-level officials who do not influence the entity at all; they are nothing you see. So attending JOC becomes a compliance thing (Interview R33 – ex-Deputy Director, Data and Strategic Information, GSPCR).

Lower-level officials in EISD argued that they did not have the power to act if JW failed to meet its obligations. They can write assessment reports to senior managers and politicians who can discuss these issues in fora such as the mayoral committee, the EMT, and the council. In these entity assessment reports, actors such as officials and politicians

in the portfolio committees can flag items in the report for those higher up. The City Manager, in particular, has a high level of responsibility as the accounting officer to ensure that water services are delivered in the city, and the member of his EMT are employed on performance-based contracts. Hence it is in their interests to ensure that JW delivers on the City's mandate. Length of tenure and degree of embeddedness in the City structure is necessary if City officials are to exercise any agency over JW or other departments.

7.7.2 Capacity and a high vacancy rate

The officials admitted that EISD was very weak as a department in terms of monitoring the entities in general. Reasons for this included understaffing, lack of funding, challenges in the recruitment process, a dysfunctional performance management system, lack of morale among staff, and planning challenges peculiar to engineering projects. Lack of capacity in terms of human resources was identified as a City problem, particularly after the new Mayor who came into service 2016 placed an embargo on recruitment. However, lack of budget and a cumbersome recruitment process were cited as major constraints. People in acting positions who were not keen to decide on important service delivery issues, and as a result, the department was weak in terms of monitoring the entities:

> In EISD, we are very, very weak at the monitoring aspect, but that is purely because we do not have the capacity. The department is currently sitting at a 50 per cent capacity. [R13] in the Water Services Units should ideally have an inspectorate team that only conducts service delivery monitoring. Currently, that function sits with somebody else in a different directorate. We have a directorate called Management Support and Oversight, and under that Oversight function, they have only two, but one resigned recently, so they only have one out of seven. Within EISD, this team was designed to do random spot checks on service delivery, where the service delivery is failing, and the response times for fixing these service delivery failures. However, currently, with this one individual, it is very difficult to do that, but the intention was to have seven regional inspectors that would work on a regional level and do all the random site spots. The problem also is that the City has not filled the position of Chief Information Officer in three years. So, maybe for three months, everybody who is acting there does not want to make decisions at that level (Interview: R16, 2017, Director, Policy, EISD).

> So that is why I have still got projects here, all these are my current projects, but I have no staff. Our biggest problem is that our staff levels are not good. I do not have a single post filled in my section here. I used to manage a whole department, but in my current job, which they created for this hybrid sector, I do not have a single person. So if I am in a meeting, there is nobody here to carry out anything. Only when I am acting director of the

> Unit can I call on people, but not for my actual sector (Interview: R2, 2017, Deputy Director, Open Space Planning).

Officials who were more experienced and had served the City for extended periods of time were in a better position to exercise agency. The City's bureaucratic process is so long and complex that very few officials could describe how things work. For example, one official said she could not describe the set-up between the City and JW, 'I do not even know their set-up' (Interview: R13, 2017, Deputy Director, Water Services). These sentiments were echoed by a senior official who emphasised the importance of tenure in influencing change. He said that the bureaucratic system in place in the City was very constraining and challenging to navigate (Interview: R4, 2018, ex-Executive Director, Spatial Planning). Where the environment is constraining, officials are forced to leave and take their intellectual capital and zeal with them. Their projects either lose momentum, collapse, or are entirely abandoned. Some current and ex-officials commented:

> It takes time to have influence; you have to be in the system for a long time to see the results of your efforts. I had a particular agenda for improving informal settlements and had plans approved by the political committee, but getting a budget was very difficult. The budget allocated was very small. There was opposition from the province, and when I left, the responsibility was given to the housing department, which opposed the idea. (Interview: R4, ex-Director, Spatial Planning, CoJ).

> It took me time to get to know the City administration. When I joined the City, within three months, I wanted to resign and leave. The City was just too big of an animal to see me making any meaningful impact. There were all these entities; they ran on their own, you are a small department within a big City, and if you do not have good mentorship when you come in and be inducted well, it can be very overwhelming. So when I meet staff, I would crack a joke, ask if you watched the soccer last night, totally different, from the work environment, because I know that is how you build relationships and tomorrow you can call them on work-related matters (Interview: R16, 2017. Director, Policy, EISD).

7.7.3 Reconciling politics and technical

The second element that affects agency is the different views held by the City and JW regarding planning for water services. As noted early, ANT predicts that if the parties involved disagree, enrolment will not take place and consequently there is no action. JW deals with capital infrastructure investment and hence is almost always casting its eye over the long term, i.e. 10 years and more. On the other hand, the City operates on a five-year political term, and politicians come and go. Consequently, policies tend to be very

fluid and change frequently as new politicians come in with new priorities. From a political point of view, it is possible to experience changes on an annual basis. For example, after Parks Tau (2011-2016) came Mayor Mashaba (2016-2019) and then Mayor Makhubo (2019-2021), and each time, priorities were refocused. However, JW is amenable to such rapid changes in focus because infrastructure projects have a long gestation period. This was one of the reasons why JW was found to be taking a course of its own and ignoring City demands. This issue was described more succinctly by an ex-City official:

> The big gripe by JW was that the five years of the electoral term where an old plan falls away and a new plan come in place did not work for them. Their rightful argument was that infrastructure plans span for 10 - 20 years, and you cannot go off and change your plan because then that will have a major impact on your master plan. There was a legitimate gripe there. In the City as a whole, Joburg Water probably has the most sophisticated infrastructure asset management planning process. Between that and the infrastructure master plan, the City has a different set of priorities than Joburg Water. Till about 2013, there were very good at coming to a negotiated list of projects, but from 2014, and I understand that it is continuing, JW is ignoring the plan that gets approved in the budget and creating their own capital project budget based on their master plan. That is very problematic when you are audited, or the people from Finance come around and say, 'but you said this, you had this in your budget, and this is what got done and did not get done. This is also becoming a bad habit of Joburg Water (Interview: R8, 2018, ex-official, Spatial Planning, CoJ).

Practical norms literature shows that where policies are difficult to implement, they are often ignored.

7.7.4 Demotivated staff and performance decline

Due to lack of capacity, officials noted that the City's performance had generally dropped. For example, expert opinion by external bodies working with the City's Group Performance Audit Committee found out that the City had regressed on the previous year's performance from 62% to 55%. Some blamed this on the new administration of Mayor Mashaba, while others argued that it resulted from deep-rooted problems in the City.

> People are not willing to. So today, you tell them this is how we do a b c d, they will do that today because you have asked them to do it, but tomorrow because you are not there behind them, they will choose the shortest, easiest way to get that thing done, and it does not necessarily mean following that way. So for me, if we can get a system in place where we can incentivise (Interview: R18, 2017, ex-Finance Director EISD).

Incentives are enablers that motivate staff to perform. However, experienced staff familiar with the system can negotiate their contracts to a bare minimum and abuse them. An ex-executive described this as follows:

> One of the problems was that there were people who knew how to manipulate the system. They were very skilled by being in the system for a long time. They knew how to negotiate their contract so that it will be the minimum required of them. They negotiated the contract in a way they knew they could meet the targets (Interview: R24, 2018, ex-Executive Director, Spatial Planning, CoJ).

7.7.5 Dysfunctional performance management system

The previous chapter notes that the City has a performance management system that is supposed to act as an enabler of City performance if the incentives are right. However, the City was not managing this system to achieve good results. Ideally, officials from Deputy Directors upwards should have scorecards in which KPIs must be achieved and be verifiable. The scorecards are supposed to be translated to lower-level officials, but this did not happen - as one official described:

> There has not been a very good performance management system, and therefore, the Executive Director's scorecard has not been handed down very well within the City. The ED obviously tries to put pressure on these directors to say, 'hey, I need this and that', but for us at our level, we know that there are those key performance indicators, but we do not have scorecards. They were not really enforced, so in theory, they are there, but if you ask many people, 'do you have a scorecard?' [laughter] The Group Heads and the Executive Directors and Executive Directors might have, but they are supposed to cascade down to lower levels, to your professionals. But this is not happening. (Interview: R19 – Principal Specialist WSR&PD, WR&B – EISD).

Apart from failing to translate executive scorecards to lower-level officials, the City further altered the reward system from monetary to kind in the form of leave. As a result, the performance system of the City broke down; officials found no motivation to exert themselves. This is what one official said:

> Welcome to the government. You hardly get a pat on the back and say job well done, you always, you lambasted with why you did not do this and why is this late, the same with the mayoral committee, it is very, I would not say punitive, but it is not an enabling and encouraging environment. You are never congratulated for a job well done, but you are always criticised for a job not well done (Interview: R16, 2017, Director, Policy EISD).

Here is a clear example of the limits of some of the principles of New Public Management. While work packages were clearly defined, officials found no incentives to excel because there was no financial reward. The entire performance management system might be checking the right things but officials have a tendency to manipulate the system for self-interest. This renders the entire system ineffective and dysfunctional.

7.7.6 Power dynamics in the Actor-network

The case of the City of Johannesburg's water sector is very puzzling when viewed from an actor-network perspective. While the main objective is the delivery of water services to residents in the city, it is very difficult to single out anyone functioning as the main actant or focal person. While interviewed officials agreed that the mayor is the ultimate point of responsibility in the City, in reality, this is not so. The water services sector is vast and has many facets. The mayor entrusts other members of the City administration to execute on policy on or her behalf. This study has shown that water services have three basic pillars that hold together, namely policy, operations, and monitoring. We have noted that legislation distinguishes between water service authority (the City) and water services provider (JW). However, when looking at the policy facet it was clear that different players each have their own form of authority. The national government through the National Treasury and Department of Water and Sanitation (DWS) have very specific requirements and demands in municipalities. On one hand, it devolves policy and regulatory instruments to municipalities while on the other hand, it has strict requirements for municipalities to report on progress. Municipalities report on a quarterly basis and at the end of the year, they must furnish National Treasury with an annual report. The annual report is a condition for receiving municipal grants, hence municipalities submit these reports without fail.

To this end, the national government through two main departments could be regarded as the key player and the rules are clearly inscribed in the Municipal Finance Management Act. As ANT predicts, clear inscriptions create a conducive environment for change. In addition, the responsibility for ensuring that this happens in the City is the City Manager.

The appointment of the City Manager is laid out as law and hence is a very important position with huge responsibilities as an accounting officer to ensure that what national government sets as policy if given due attention. The significance of the work of the Municipal Manager is further demonstrated by the office of the Auditor-General who is tasked with auditing municipalities. As a result, national policy prescriptions form part of the City Manager's scorecard and from this perspective, the City Manager could be regarded as the focal person in the City actor-network of service delivery.

Linked to the City Manager is also operations within the City. While the City Manager is the overall accounting officer reporting to the national government, he needs to ensure that all the operational work of service delivery is performed. To this end, he leads team executives who are line managers of departments, groups and entities. This actor-network of executives has the City Manager as the focal person and to ensure that action happens, each line manager is linked to the City Manager through a performance contract. This performance contract is further incentivised with a performance bonus at the end of each year. Each line manager must present evidence of having fulfilled targets as per the agreed contract with the City Manager. The managers are known for demanding evidence of their performance from their subordinates who are tasked to compile evidence files that go to the City Manager. At this level, another actor-network is created where the line managers are the focal persons.

The third facet of services delivery that results in another actor-network is monitoring and reporting. Reporting is an important routine task in the City and is heavily driven by the principles of NPM. Water services delivery has been broken down into various work packages and assigned to different units, departments and individuals. Given that water services are provided by an external agent, the reporting chain extends to reach the entities who are in this case the generators of reported data. There is much pressure on JW report on specific issues related to water to the various department as described in earlier chapters. GSPCR in particular is the main unit that demands reporting information. The City's unit for monitoring and evaluation is located in GSPCR, and it is this unit that is responsible for compiling the all-important annual report and works closely with and for

the City Manager. One of the M&E officials considered their function as very important and powerful: ‘For us, it’s an opportunity for us to lead the city to the highest level. It’s a powerful function and it is well-positioned in the office of the city manager’ (Interview: R12, M&E GSCPR).

ANT allows for an analysis of the actor-network both singly and collectively, and to identify the various focal persons in each case and where the strong linkages are. As seen here, the executive management is enrolled by the City Manager and locked into his actor-network through performance contracts. This is not the case with lower-level managers and officials where there are no performance contracts. Given the imperative to report on performance targets, M&E demands and handles large amounts of quantitative data. Senior managers need the data to feed into their performance assessments with the City Manager and to reflect good performance in lieu of bonuses. For senior executives, there is pressure to report on the performance of their respective units and this is measured against their own performance as managers. Hence, many lower-level officials reported that much of their time is spent on ‘compiling evidence files for their bosses’. The result is actor-networks nested within other actor-networks.

7.8 Conclusion

The purpose of this chapter was to analyse how the City monitors JW by identifying the actors involved, their authority, the instruments used in performing its function, and the challenges for exercising agency over the entity. This objective was achieved by gathering data from City documents, interviews with both current and former officials, and taking residence in the City’s department of Environment and Infrastructure. The chapter deployed Actor-Network Theory to unpack the City’s organogram related to water and to navigate the intricacies of the City’s bureaucracy. By doing so, I could locate the various parties involved and identify their roles and functions concerning water services. The value of using an ANT approach was that I was able to portray the local state not as a unified and coherent entity but one that is composite and diverse.

An important finding is that the City, as a municipality, has obligations that flow directly from the Constitution and several other pieces of legislation that govern not just local government but service delivery, in this case, water. These documents assign the role of Water Services Authority to the City and prescribe how such services, water included, should be provided and governed. For example, the City model of corporatisation is specified in terms of the Municipal Systems Act 32 of 2000, and other matters relating to monitoring and finance are dealt with by the Municipal Finance Management Act 56 of 2003. However, in the case of Johannesburg, it was also noted that the service delivery model was heavily influenced by the financial crisis in the late 1990 and the City's plan to deal with the crisis called the iGoli 2002 Plan. The White Paper on Local Government of 1998 was also instrumental in shaping the nature of local government systems by introducing a New Public Management ethos in municipalities. Hence, the City's path since 2000 has been a product of a series of intersecting histories and continued efforts over the years to adjust and refine its governance model in search of a stable and effective one.

The analysis was based on an ANT approach in order to unpack the City's governance model and to identify the key players and intermediaries that connect them. From this analysis, it was clear that the governance of water services in the City is a shared responsibility among numerous units and individuals. The chapter highlighted how this scenario is a source of many oversight challenges that the City faces. In particular, the City and entity disagree on what the priority mandate should be for Johannesburg Water. Johannesburg Water and specific units within the City, e.g. the Budget Office, emphasise financial sustainability while Council and the Mayor have a pro-poor agenda of ensuring that the poor are served.

The City has consequently sought to strengthen its regulatory mechanisms to ensure that the entity fulfils both objectives. The City has achieved this by expanding its governance structure and creating new structures and units, particularly after 2011. However, this move has resulted in the regulatory role of the City being split and spread across many different units and actors in the City, which resulted in duplication of effort, conflation of

roles, and endless requests for data placed on JW. The chapter concluded by identifying some of the factors that hinder the City from exercising effective agency over JW.

8 AN ACTOR-NETWORK THEORY READING WATER GOVERNANCE IN THE CITY

This chapter presents an analysis of the findings and draws together the main threads of the arguments in light of ANT and NPM frameworks and the methodology discussed in Chapters 2, 3 and 4 respectively. The empirical chapters explored in detail the relationship between the City and JW and teased out the complexities and ambiguities with respect to who governs water services in the City (Chapter 5). The institutional knowledge of this relationship was discussed with a level of detail not readily available in other accounts; hence this thesis makes a contribution in this regard. The thesis also developed a nuanced understanding of the formal governance processes while acknowledging the existence of informal processes that are also at play in the entire governance system (Chapter 6). The significance of documents and other written material and their movement within the governance machinery was highlighted (Chapter 7). While they appear passive, documents and written materials were observed to be active actants because of the inscriptions they contain and being instrumental in translating policy ideas into action by human actants.

Based on these three chapters, it was observed how the governance structure evolved over time and how some actants, both human and non-human, have disappeared and new ones emerged while others have become redundant. It was clear that when considering water services governance in the City of Johannesburg, there was no single definitive point of authority. Rather, there is a multiplicity of both human and non-human actors that act and react against each other in governing the sector and in regulating and monitoring the affairs of JW. ANT was deployed to untangle this complex system and shed light on who governs JW. It was also revealed that no single actor-network, but several networks exist and vary in size and influence while some are nested within larger networks.

This thesis considered the governance terrain of water services complex enough to warrant an ethnographic methodological approach for a deeper and more nuanced analysis of the complexities. Such knowledge was essential to arrive at the conclusions

made in this chapter on the implications of the findings about the City's ability to achieve distributional and equity goals of water service delivery. JW not only provides water, but collects revenue which enables to the City to deliver services in other sector that are non-revenue collecting.

8.1 An actor-network reading of the governance structure

In Chapter 3, the Actor-Network Theory (ANT) was discussed and analysed with respect to the case study at hand. Given that ANT does not a priori divide the world into micro and macro contexts or attribute agency to either individuals or social structures, the thesis took account of the broader contextual issues surrounding the relationship between the City and JW. Hence, the post-apartheid history of Johannesburg leading to the financial crisis in 1997 was examined in detail as the trigger event leading to the formation of JW as a private entity for providing water services on behalf of the City. The relationship between the City and JW creates an actor-network for delivering water services to residents in the City. However, since ANT emphasises contextual issues, it was also necessary to look beyond the City and JW to understand more clearly how and why this actor-network operates. The thesis thus examined the entire water sector from the national sphere of government down to the local government sphere. The reason was that, according to ANT, many actors are locked into networks the specific elements of which influence their actions, reside outside of the focal organisation (Alcadipani and Hassard, 2010).

8.1.1 Triangulation

In analysing the governance of water services in the City, triangulation was insisted upon. Information from documents was compared with information gathered through interview in particular to resolve issues that appears unrealistic in documents such as non-performance against certain KPIs by JW with no clear consequence for the entity. Similarly as in the next section, in generating an outline of the various actants and intermediaries. Relying on one source was not sufficient in obtaining a full picture of the structure of the City and of the responsibility of various actors.

8.1.2 Main actants and their intermediaries

Figure 19 below shows the main actants that populate of the water governance landscape of the City of Johannesburg. The figure portrays the City as the focal actant with the national government to the left and JW to the right. The national government formulates and hands down policy and monitoring tools which City passes on to JW. The City expects JW to report regularly in order for the City to report to the national government as required. As the WSA the City is held accountable for water services by the national government. According to one official, the "national government looks at us, they do not see JW because JW is our entity" (Interview: R13, 2017, WSR&PD).

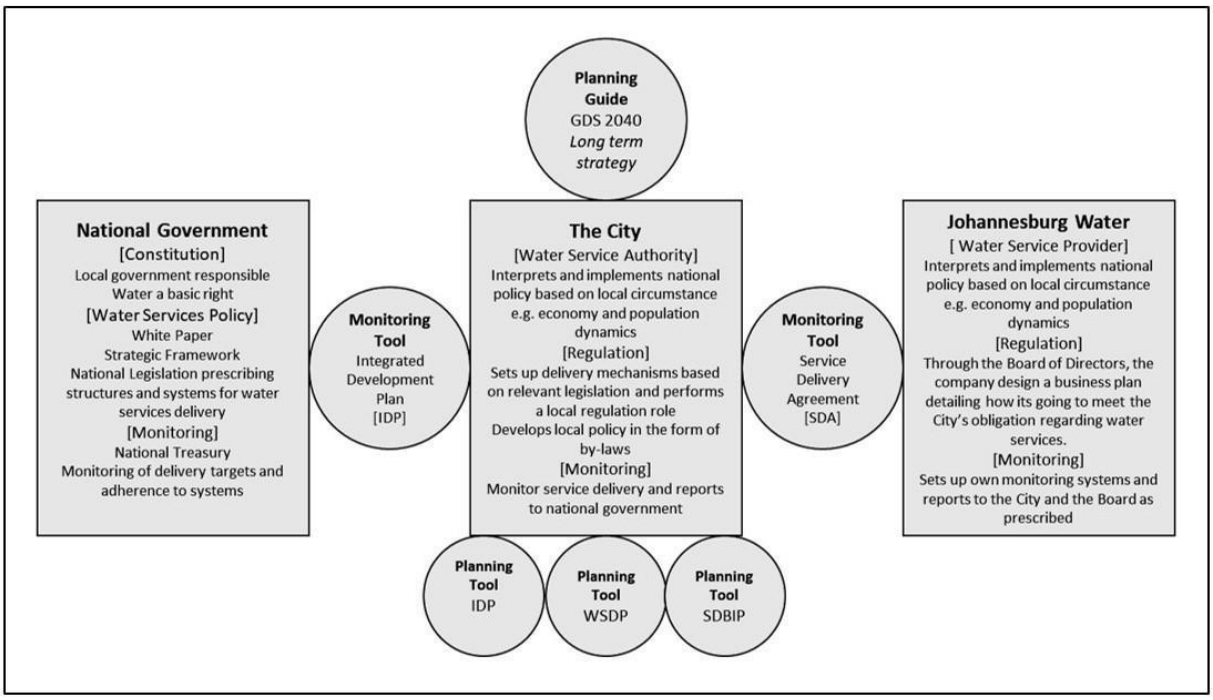


Figure 19: Main actants and the respective intermediaries
Source: Author

It was noted in Chapter 6, section 6.2.2 that the National Treasury has a mandate that flows directly from the constitution to ensure transparency and accountability in the management of public finances (RSA, 1996). To this end, the department formulates and publishes various statutory instruments related to the utilisation and management of public finances. The National Treasury, in particular, demands that municipalities adhere strictly to the provision of the Municipal Finance Management Act, report regularly on progress on the IDP, and publish an Annual Report without fail each year as a condition for receiving a municipal grant. Further, municipal accounts and those of its entities are

audited by the Auditor-General, and the results are made public. As predicted by ANT, strongly inscribed documents have agency in that they lead to action - as one official commented:

> When you read the other Act, it tells you, 'the city shall produce an Annual Report' and that is the sole responsibility of the City Manager. If the City fails to produce the Annual Report, National Treasury won't be talking to me, they will talk to the City Manager and the City Manager will crack the whip on us (Interview: R12, 2017, GSPCR).

8.1.3 The City and JW as an actor-network

The tendency to view the state as a unified whole has been disputed (Latour, 2005; Gupta 2010). While it could be argued that the City comprises many elements, it was through an ANT analysis that the various units and individuals were mapped out; how they were connected and how they exercised agency over each other. ANT was therefore instrumental in exposing the complexities of the City Administration that would otherwise remain hidden. For example, the link between JW and the three main City units, Group Governance, GSPCR, and EISD, proved that the City was not necessarily a unified whole but a tangled knot comprising multiple elements (Latour, 2005). While the number of actors in the network could have been potentially infinite, it was necessary to extend the network to as far as was necessary to answer the research question of who governs JW.

As described in Chapter 6, the ANT approach revealed many different actors, and more critically, has shown that some actors play multiple roles in multiple networks at multiple points. For example, Executive Directors are heads of line departments, but they are also expected to convene Cluster Committee meetings for monitoring progress for their cluster. The Mayor is, on one hand, an executive administrator and on the other, a politician seconded to implement Council policy while fulfilling his political party's manifesto. In Chapter 7 it was concluded that there are separate actor-networks for policy formulation, operations, and monitoring, and the research shows that many actors participate in these networks. Since ANT allows for a variety of data collection methods, these were utilised to examine the rationale of the various networks.

Officials were interviewed about their work and their role in the governance of water. Their actions were based on inscriptions that enrolled them into various actor-networks. However, it was also observed that there were many instances where inscriptions were not clearly defined resulting in inaction. For example, the performance management system for non-executive staff was dysfunctional - as one official described:

> There hasn't been a very good performance management system and therefore the scorecard has not been handed down very well in the City. Obviously, the ED will try and put pressure on the Directors to say hey I need this and that, but for us at our level, they were not really enforced. So in theory they are there, but if you ask a lot of people 'do you have a scorecard?' Hahaha!

An important issue observed was that when documents are crafted, they are turned into black boxes as described in Box 1. ANT predicts that an effective black box may go unnoticed, indicating success and alignment of interests (Emsley, 2008; Ahmedshareef et al., 2014). However, when it makes its presence known, it indicates malfunctioning and management attention will be required, e.g. in the case of outdated policies. ANT proved to be a powerful tool for opening the black boxes in the City and examining what goes on inside (Bilodeau and Potvin, 2016). For example, on arrival in the City, the study found out that the water services bylaws that should guide the water services sector were outdated by nearly 20 years. When challenges arise only then are policymakers forced to open the black boxes as in the cases of a pending drought and the need to improve demand management practices in water usage which causes the City to update its water services bylaws. Failure to revised bylaws may means that residents may be shortchanges in terms of delivery and their duties as residents.

8.2 A compendium of documents governing JW

While many documents exist (See Table 8), five are given special attention in this section. The major documents that can be considered as part of who governs JW are the Constitution of the Republic of South Africa, the Municipal Structures Act, the Municipal Systems Act, the Municipal Finance Management Act and the Water Services Act. These founding documents set the parameters for managing local government affairs and are administered by the national government. The Constitution gives the overarching

framework within which water services are provided and monitored by mandating local government as the main actor.

8.2.1 The Municipal Structures Act of 1998

The Municipal Structures Act of 1998 then provides for the establishment of municipalities and delineates their powers and functions. The Act is also designed to regulate internal systems, municipal and office-bearer structures, in particular the Council and its subcommittees e.g. Section 79 portfolio committee, the Executive Mayor, and the City Manager. In addition, it was through the guidance of the Municipal Structures Act that the City developed the Oversight and Scrutiny Framework for guiding the Section 79 Committees in monitoring services provided by the three entities (CoJ, 2011).

8.2.2 Municipal Systems Act of 2000.

Another important founding document in governing JW is the Municipal Systems Act of 2000. The Act emerged from the White Paper on Local Government of 1998, with the purpose of assigning functions and powers to municipalities and providing for the establishment of municipal entities and the submission of annual performance reports (RSA, 2000). The Act also made provisions for establishing municipal entities and other mechanisms to provide municipal services e.g. the JW corporatisation model. The Act contains a range of systems on which municipalities are expected to report, and this includes the mandatory formulation of the Integrated Development Plans. These IDPs are broken down into SDBIPs to provide a basis for implementing and monitoring service delivery, the performance management of entities and senior managers, the Service Delivery Agreement, and performance contracts. It is now clear why ANT treats documents as active objects; they provide structure and guide processes in the sector.

8.2.3 Municipal Finance Management Act

The critical importance of the Municipal Finance Management Act administered by the National Government has also been noted. Its influence extends to reach the entities as indicated by one ex-official of JW:

> After the IDP, they have what they call an SDBIP, service delivery budget implementation plan, and it is an annexure of the IDP. The SDBIP now has the indicators for each entity and each department, and that is what we report on to the City. A typical SDBIP will have indicators for each of the City KPIs. We, as JW, contribute to the implementation indicators, because we are doing the work. National departments won't speak to us directly by the City does because we are part of them. The City will send the reporting requirements to us and we have to report (Interview: R11, ex-official, JW, Managing Director's Office).

According to Circular 13 of the MFMA, the objectives and goals contained in the SDBIP must be quantifiable to enable performance monitoring and evaluation of service delivery outcomes (CoJ, 2012b). For this reason, JW maintains a performance verification matrix in Excel, which contains up to 23 indicators on which the entity must regularly report to the City. JW shares this matrix with KPMG, the entity's audit consultant, who performs analyses on how JW has progressed on each indicator. Linked to the MFMA is the Auditor General of South Africa. The Auditor-General focuses on compliance issues related to the MFMA. The audits are performed in a standard manner each year, and municipalities are audited on the very same financial issues during each annual audit.

8.2.4 Water Services Act of 1997

Lastly the Water Services Act 108 of 1997 is another important founding document and a strong influence on the governance of JW. Section 19 of the Act gives municipalities a choice to provide water services either internally through a line department or externally through a private company or a corporatised water utility. If the municipality decides to provide services through a corporatised entity, the municipality will play the role of local regulator. The Act contains regulations for guiding the City in its oversight function. This means ensuring that the entity complies with the water services regulations and standards and meets the service delivery targets of the parent municipality. In order to achieve this, the municipality must have sufficient institutional mechanisms and a governance framework to hold the utility entity to account.

8.3 Key notions of ANT and how they informed the study

Several notions of ANT such as translation, the active role of objects, generalised symmetry, and enrolment were described and discussed in Chapter 3. It is important to note that these notions had a particular influence on how the study was conducted.

8.3.1 Documents and artefacts as actors

When documents and artefacts were introduced, detailed insight into the complexity of the different forces at play were revealed. For example, it was not easy to differentiate between the roles of Group Governance and EISD. Without a closer look at how the documents that guide their conduct are inscribed, it was going to be difficult to understand that different sections of JW's Quarterly Report were designed for different stakeholders in the City. For example, GSPCR only assesses progress on IDP targets while EISD looks at compliance to water services policy. Without ANT it would have been easy to overlook how documents are drafted and turned into black boxes. Additionally, the assumption that once a policy is in place results will follow was proved false, and ANT showed how this occurs through the notion of artefacts and inscriptions that act as intermediaries between policy formulators and policy implementers.

8.3.2 Generalised symmetry

Generalised symmetry is an important concept of ANT which ignores the divide between human and non-human actants. From this perspective, generalised symmetry treats data and policy documents as active objects capable of transforming the way water services are regulated. If taken as passive, their role would be underestimated, but they are actively involved in transforming established practices by influencing the way human actors are associated (Cresswell et al. 2010). For example, the City developed the GDS 2040 document with 10 priority areas. Each successive mayor has chosen priority areas for his term from that list and has not necessarily crafted new ones. The IDP document is a five-year plan with specific targets that the City must achieve and this becomes the standard by which the City is assessed by the National Treasury Department. Hence, the study has shown that combined with the ANT notion of networks, treating data and documents as active objects leads to a clear conceptualisation of the connections that exist between actors.

By allowing the non-human to contribute to understanding the human, one gets a holistic view of reality. For example, although line departments were headed by MMCs, the heads of departments entered into performance contracts with the City Manager and not the MMC, causing the Executive Directors to be more responsive to the City Manager than the MMC. At the same time, the MMC will apply political muscle to influence processes to gain political mileage such as advocating free services or improved service during this run-up to the elections. This was one of the potential areas likely to cause conflict and hinder progress towards equity in delivery. The other potential area of conflict was between the Managing Director (MD) of JW and the Board of Directors. The MD has a performance contract with the City Manager but also has to account to the board. Officials noted that this dual accountability was problematic in that it resulted in delays and even inaction. It is therefore clear that although JW is constituted as a private company it has dual accountability; to the board of directors, and to the City through multiple actors in the City to which JW must report quarterly.

8.3.3 Enrolment

The notion of enrolment is very critical because it enabled this study to locate the most powerful actors in the sector and how these actors enrol others into their networks. For example, the mayor enrols a 10-member Mayoral Committee to help him make important decisions. These MMCs enrol the EDs and Group Heads and the MDs of entities. However, as discussed in the preceding paragraph, the linkage between the MMC and the ED is not as strong as that between the ED and the City Manager where the relationship is inscribed in a performance contract document. The power of ANT was demonstrated in enabling the exploration of these complex relationships between actors and in particular, their power relations. What emerged from the study was, therefore, an explanatory model that traces associations using textual data from reports and other City documents, identifying actor networks, and examining actor-network dynamics such as alignments or conflicts of interests, coordination, and constraining and empowering influences such as incentives and barriers (Callon, 2012). Given the vastness of the water services sector and the presence of many black boxes, ANT worked as a useful tool for opening up the boxes.

8.3.4 Translation

Through translation, the focal actor undertakes to build an actor-network to achieve a particular goal. Analysing translation in the City exposed some of the hidden processes that happen behind the scenes and are often taken for granted. The general aim of translation is to bring into alignment the diverse views, ideas, interests, expert knowledge and values to move the sector forward. ANT illuminates these issues and processes that aim to bring into a single visible ordering what could otherwise have remained unnoticed. For example, Mayoral Lekgotla events are internal to the City and only the outcomes of meetings are communicated to the public, for example, mayoral priorities and institutional changes. Yet, all these are products of intense and fierce debates that happen at Lekgotla meetings. Since ANT demands minutes of such proceedings, other different views surface even when they did not prevail, helping the researcher to explain some of the inconsistencies found in the sector. For example, Mayor Mashaba did not prioritise environmental issues, and some lobbying had to be launched by officials to bring it back as a priority area.

8.4 How the actor-network enables or hinders equity objectives

One of the major arguments of this thesis is that the JW model of water service has had the effect of splitting the City's role into Water Service Authority (the City) and Water Services Provider (JW). The City was responsible for planning and policy development while JW was implemented. However, the operational distance between the two entities created problems of oversight. The City made a number of institutional changes over the years, and the effect of these changes was a diffusion of the City's role oversight and regulation. The task was split and spread across many different actors operating independently of each other to such an extent that it was difficult to locate where the ultimate point of authority rests. This was manifested in the way City divisions interacted with JW; each communicated separately with JW demanding reports in their own unique format and style.

8.4.1 Who is responsible?

These kinds of complexities are often present at the local government level because this is a sphere of practice and the situation is usually fuzzy and unpredictable (Gupta, 2010;

Jaglin, 2014). While water services get delivered, it is very clear that one cannot identify who in the City is responsible and accountable for non-delivery. A scan through the scorecards of top and lower-level officials show that their KPIs are not binding in terms of assigning responsibility. The City thus relies on statutory oversight structures, in particular the Section 79 committee, to act as watchdogs by scrutinising reports and pointing out where failures are occurring. These committees are formally constituted but are practically disempowered and often bypassed by the Mayoral Committee, or their recommendations are ignored.

8.4.2 Intermediaries weakly inscribed

The resultant complex actor-network is linked together with weak intermediaries in the form of regulatory instruments, and legislation and planning documents that assign roles and shape relationships. Because they are weakly inscribed, the actor-networks are also weak and struggle to hold the entity to account. An observation made during fieldwork was that officials are not very particular about the text when drafting documents and invest very little to scrutinise what they write, resulting in poorly inscribed policies and bylaws. I made comments in response to a bylaw document and the comments were considered too academic. Additionally, the City's interests in ensuring access to water for all, remain in direct tension with the profit motive of the entity, with more attention given to financial balance sheets and audits than to equity objectives.

8.4.3 National Actors

On the contrary, accounting procedures administered on municipalities by the National Treasury through the Municipal Finance Management Act (MFMA) are more effective in instilling accountability. The MFMA is a very powerful piece of legislation with strict compliance requirements, and municipalities can face severe consequences for breaching the provisions of this Act. The focus of the MFMA is on finance and this is the focus of the Auditor General during audits. This is an indication that National Treasury is concerned about systems, and in turn, municipalities are working towards having clean audits while social justice objectives are ignored. This was noted by one official interviewed:

> If you look at the way the MFMA and PFMA are structured, they want a very particularised kind of bureaucracy whose highest value is a clean audit. Nothing wrong with that, but it's one set of values. We have to be honest that you can have a very clean audit and be nowhere on your developmental objectives. You can have full customer satisfaction on water, electricity etcetera and still be very behind on developmental objectives because your customer base may only include people who already have access to those resources (Interview: R6, 2016 ex-official mayor's office, CoJ)

On the other hand, the National Department of Water and Sanitation (DWS) is notorious for introducing a whole range of instruments for regulating and assessing performance in the water sector, but most of its instruments are only 'nice-to-have', adding to the burden of bureaucracy due to the large number of indicators that repeatedly have to be reported on. Hence, the multiplicity of planning documents, regulatory instruments, and multiple units in the City are responsible for creating a complex and amorphous governance landscape for the water sector. This is exacerbated by the City model of water service delivery where a wholly-owned company with its own management has been appointed to deliver services on behalf of the City.

8.5 New Public Management

The preceding sections, which gives an actor-network reading of the water service sector in the City of Johannesburg, have shown how documents through inscriptions and the power of translation can make the sector more legible and functional.

8.5.1 Multiple control fuelling fuzziness and complexity

It has also been shown that the multiplicity of documents and their evolution over time has been responsible for creating fuzziness in the water services sector. Poorly inscribed documents or total absence has led to weak and strong networks existing adjacent to each other within the City's entire water services sector. The existence of these documents was, however, not without rationale and to explore this rationale, this thesis turned to the theoretical framing of New Public Management (NPM). The main argument from this angle was that the institutional relationship between the City and JW serves to highlight the limits of NPM. An attempt to achieve efficiency and accountability led to the introduction of numerous controls whose combined effect ran contrary to the desired

objectives. Rather, a more complex and opaque governance structure, difficult to navigate, emerged resulting in the formation of informal networks.

8.5.2 NPM has permeated the local state

NPM and its tenets have been described in detail in Chapter 4. There is frequent debate as to whether the City of Johannesburg was influenced by neoliberal ideas or not. Whichever the case, it was apparent that the corporatisation model of water-service delivery in the City was modelled along the lines of NPM, embraced by the national government through the GEAR policy of 1996 and introduced into local government through the 1998 White Paper on Local Government. The rationale was to create an efficient bureaucracy able to tackle service delivery challenges and backlogs, particularly among previously disadvantaged communities. Hence, NPM introduced a governance paradigm viewed as the panacea for improving service delivery in South Africa and even globally. As a managerial model, NPM sought to reorganise government and public service institutions to focus their attention on outcomes (Kelly 1998). The NPM approached required the devolution of power regarding service delivery to lower echelons where there was direct contact with the people. One interviewee said that the mandate of local government is ‘taps and toilets’ (Interview: R10, Water expert, 2018).

8.5.3 JW – an exhibition of NPM led reforms

Given its tenets, NPM influenced governance in two main ways. The first was the creation of governance structures and secondly systems of operation and monitoring. In the case of the City and JW, the aim was to create a single water services utility for the entire City that would operate efficiently in order to generate revenue while extending services to previously disadvantaged communities. JW was expected to run along the lines of private sector enterprises with autonomy to raise money from the bond market. JW was established as a private company under the Companies Act of 61 of 1973 (now Act 71 of 2008), to harness private sector finances, knowledge and expertise in the delivery of water services. An ex-official in the City at the time of the formation of JW described the rationale this way:

> As part of the iGoli 2002 Plan, one of the ideas that came up was to corporatise some of the functions, we decided to corporatise so that we could unify all the fragmentation so that water services are run by one board and that board is accountable to a single Metro which ensures that things functioned effectively. Also if you have a corporate identity, you could raise money on the bond market, have your own loans, off-balance sheet kind of funding sometimes (Interview: R15, ex-official, Central Strategy Unit).

8.5.4 JW – Separate entity but not independent

However, as observed in Chapter 7, JW was not entirely independent as both City and National Treasury extended their tentacles to influence how JW should run its affairs. As a wholly-owned City entity, the City wanted to ensure that the company provides water equitably in ways that take past injustices in delivery into account. For example, JW was expected to charge low rates to poor communities, and also pay dividends to the City as the shareholder. As a public service utility, JW was still subject to the provisions of the Municipal Finance Management Act (2003). This contradiction became a major stumbling block to achieving equity in water service delivery as epitomised the Mazibuko Case. NPM failed to recognise that the local government in South Africa was mainly concerned with service delivery and that the majority of people served were poor and could not easily be turned into customers. While policymakers were attracted to NPM because of the promised economic efficiency, citizens were opposed to it because they were not ready to pay for services and felt that they had lost the ability to hold the City to account with respect to water services (Herrera and Post, 2014).

8.5.5 City-JW – relationship opaque, hollow, dysfunctional performance monitoring

The client-contractor relationship that existed between the City and JW is typical of NPM and was designed to create a more precise division of responsibility between the principal (the City) and the agent (JW). This thesis has shown that attempts to do so has led to the creation of a vast and opaque governance structure with a multiplicity of actors whose roles are often conflated. This thesis advances another argument, namely that instead of creating a lean administration, the City ended up with an expanded and complex administration that further fragmented its oversight function over the entities. This was particularly the case following the institutional reforms of 2011. Both the White Paper on Local Government and the IDP placed a strong emphasis on a performance management system for senior managers in line with NPM principles. As an instrument of governance,

the system was meant to incentivise managers to perform by setting specific targets to be rewarded with performance bonuses. The City embraced the system on the assumption that 'if top managers perform, the City can achieve its strategic objectives' (Interview: R1, 2017, GSPCR). However, the system was uniformly applied and there was lack of interest among staff due poor rewards for good performance (Interview: R24, ex-ED, CoJ, 2018).

8.5.6 The dilemmas of equity and policy targets

In Chapter 5, it was established that water services delivery in post-apartheid South Africa reflected inherent tension between equity and efficiency. Striking a balance between the two was a challenge for municipalities. By opting for a corporatisation model, the City hoped to achieve both objectives simultaneously through efficient delivery and revenue collection to build capacity for extending services to needy areas hence achieving the social justice objective (Smith, 2006). However, widespread poverty meant that many residents qualified for free basic services such as JW could not sustain. JW was not keen on extending services to areas where revenue was not expected. In fact, JW demanded that water be paid for or services be terminated as in the case of pre-payment meters. The irony was that the entity was formed as part of the strategy for rescuing the City from a financial crisis, and so it introduced ways to increase revenue collection such as pre-payment water meters. At the time, installing prepayment meters in poor areas ran contrary to the social justice motive of ensuring access to water for all.

8.6 City policies, equity objectives and weak inscriptions

It was noted the ANT treats documents not as passive elements but as active participants in an actor-network. It was also observed that NPM generates a large set of planning documents and monitoring tools. This section merges two aspects in order to analyse the translation effect of the key planning documents in the City's water services sector. The object is to scrutinise the ways in which these documents are aligned with one another and the translation they operate in order to achieve equity in the delivery of water services. The study identified three interlinked documents that outline the strategic intent of the City with respect to water, namely the GDS 2040, the IDP and the SDA. The GDS sets out the

overall aspiration of the City over the long term, while the IDP condenses this vision into a five-year plan. The SDA is a contract that JW enters into with the City and contains commitments by both parties for ensuring a certain level of service delivery.

8.6.1 The Growth and Development Strategy (GDS)

At the City level, the GDS 2040 document was the main document that guided planning across departments and entities. Some City officials referred to the GDS as their 'Bible' to which all planning by departments, units and entities were linked. The Executive Mayor was an interested party in the GDS, and all departments were expected to prove to him that their plans were contributing to the goals of the GDS - as illustrated in this quote by an official:

> Now, the GDS is the guiding document that we are working towards. Out of the GDS, we derived our IDP which is our 5-year strategic plan that stipulates what we going to do within the next 5 years. So whatever is in the IDP, it must be aligned to what we have said must happen in the GDS. And based on that we do our departmental Business Plans, to say how are we are actually addressing the issues in the IDP and in the GDS. You find, if you look at the Business Plan, it says what objective in the IDP it is addressing and what objective in the GDS is it addressing. (Interview: R9, 2014, EISD).

There is a commitment in the GDS to resolve apartheid injustices in the City but there is no explicit reference to service delivery. The GDS states that "[t]he strategy restates the City's resolve in confronting the past injustices created during Apartheid, working towards a democratic, non-racial, non-sexist and just City while simultaneously confronting present and future challenges as they emerge" (CoJ, 2011, GDS 2040. p.8).

Hence, on its own, the GDS only states in general terms what the City hopes to achieve within the next 20 to 30 years. Without strong individuals like the Mayor, the GDS has very little power of translation and can be subject to different interpretations. The inscriptions in the GDS are simply not strong enough to translate into action. Some officials confessed that in their planning they only mention the GDS in the first paragraph to falsely indicate their commitment to it, otherwise their plans are not linked to the GDS in most cases.

Specific to water, the GDS makes several proclamations. Outcome 2 of the GDS states that City aims to '[p]rovide a resilient, liveable, sustainable urban environment – underpinned by infrastructure supportive of a low-carbon economy' (GDS, 2040, p.8). Hence the GDS's primary target and guiding principle is the eradication of poverty:

> The City of Johannesburg will continually assist the poor to build capacity, thereby supporting them in accessing the city and stepping onto the ladder of prosperity […by targeting] new households, internal and circular migrants, those in hostels, informal settlements and historical ghettoes, the unemployed youth, refugees and others who are vulnerable to access urban services. (CoJ, 2011, GDS 2040. p.8, my emphasis).

More precisely, the GDS states that the City will fulfil its Constitutional duty to provide basic needs for the community by "ensuring the affordability of municipal services, public transport, and social facilities, through progressive tariff structures, creative cross-subsidisation, and targeted social packages" (CoJ, 2011, p. 33). Given the challenge of informal settlements,[14] the GDS takes cognisance of the spatial role that informal settlements play, representing 'the means by which the most socially and economically disconnected queue for access' (CoJ, 2011. p.47). However, there is no particular statement in the GDS regarding their status and the provision of basic services to these specific spaces. Whilst there are hints in the strategy about acceptance of in situ upgrading of informal settlements, there is no explicit mention of any policy direction towards infrastructure provision of water to these settlements in particular. The general discourse rather points to classic neoliberal rationalities, cost-recovery and behavioural change through engagement with residents, linked to public investment to fix and upgrade infrastructures using smart technologies.

8.6.2 The Integrated Development Plan (IDP)

Directions related to service delivery are made more explicit in the IDP document, a 5-year plan claiming to materialise all the strategies contained in the GDS, but which is based on the mayoral priorities for a specific mayoral term. An analysis of the IDP for 2015 showed that the City acknowledged its constitutional obligation of providing services, dedicating an entire chapter to service delivery. One of the key objectives in the

[14] At the time of research, officials estimated the number of informal settlements to be over 200.

City's IDP is stated as providing “equitable access, quality basic service provision, and the extension of services to cater for demand and growth pressures” (CoJ, IDP, 2015 p.162). In particular, the City believed that “to get basic services right” it must commit to the “progressive and systematic reduction of service delivery breakdowns and backlogs across all regions” and provide for a minimum service level standard for all. Figure 20 below shows the service standards related to water outlined in the 2015 IDP during the time of this research.

Core service	Service standard
Burst water pripes	Response within an hour and repair within 12 hours of logged call
Restoration of sewer system post overflow	Response with an hour of looged call (repair thereof – 12 hour)
Compliance with SANS 241 water standards	100% compliance – uninterrupted Blue Drop Score >98%
Water meter readings	98-100% currently read metres monthly
New water connections	Installation with 7 days and 100% functional and correctly read within 24 hours of installation
Clearance/repair of sewer blockages	Within 24 hours of logged call
Call Centre billing queries	Acknowledgement within 24 hours and resolution within 3 days of logged call
Reduction in water losses	>10% reduction: Quarterly (Target 36.8% non-revenue water losses)
Service interruptions	Communication sent to citizens. Planned: 7 days before interruption. Unplanned: immediately

Figure 20: Service standards
Source CoJ, 2015/16 IDP, p. 163

A close examination reveals that issues of access to or lack thereof have been omitted. This omission was confirmed by the City’s scorecard, which contains the performance indicators against which the City is measured by National Treasury Department (Figure 21 below).

IDP programme	Key Perf. Indicator	Target 2013/14	Baseline	Target 2014/15	Target 2015/16	Intervention	Implementing Dept./MoE	Lead Cluster
Customer Service Charter	% achievement in service level standards	70% achievement of service level standards	41.07 %	80%	90%	Area based servicer standards turnaround time improvements	Group Governance All department and MoEs	Good governance
Urban Water Management programme	Demand side management % reduction in water loss (non-revenue)	Non-revenue water loss at 27% (Target revised downward	Non-revenue water losses at 35%	Non-revenue water losses at 29%	Non-revenue water losses at 35%	Interventions to reduce non-revenue water Blue Economy projects	Johannesburg Water	Sustainable Services Cluster

Figure 21: City's scorecard on specific programmes in the IDP
Source: Source CoJ, 2015/16 IDP

While it is clear under the Urban Water Management Programme that the aim is to reduce water losses,[15] it is not so in the Customer Service Charter. By looking at the implementing departments, one can infer that the City is referring to all services that the City provides. However, this is problematic in that the City cannot set the same level of standards for all services given the difference in the nature of these services. This leaves one wondering where exactly quantities for water services are specified. While NPM emphasises setting specific targets, inscriptions such as these render the translation process difficult thus weakening the entire actor-network of water services.

8.6.3 The Service Delivery Agreement - SDA

Finding no concrete inscriptions regarding equity targets in the GDS and the IDP, the research turned to the SDA. The SDA is a legal document that binds both JW and the City into an agreement for the provision of water services in the City. In terms of ANT, the SDA acts as an intermediary between JW and the City and enrols and locks both parties into an actor-network. The City expects the company to operate efficiently in order to

[15] Water losses are referred in the City as 'Non-revenue water': water that gets lost through leaks, illegal connections, and burst pipes - where no revenue can accrue to the City. It is part of the City's mandate to reduce non-revenue water.

generate much-needed revenue, while the City also needs to provide enough funding for capital and operational expenditures.

An analysis of the SDA document shows that it is mostly a process document that guides JW in terms of the requirements relating to planning, implementing and reporting and what documentation must be produced. As such, the statement in Figure 7 above is not binding as it needs to be read with a host of other unspecified documents. The blurriness of the SDA in terms of what JW needs to achieve may cause JW to think that it is an independent entity. However, the council is responsible for appointing the board of directors and in most cases the members are appointed with an understanding that they will act in the Council's interest. This proved to be inconsistent with the intention of NPM of remaining at arm's length and avoiding political interference.

8.7 Regulation and monitoring of JW

The blurriness of instruments in specifying who and how JW is regulated caused the attention of the researcher to focus on the WSR&PD sub-unit of EISD. It emerged that this sub-unit interacts with JW with respect to water services.

8.7.1 Regulatory elements

The regulation of JW by this sub-unit is specified in the Business Plan document of EISD. Figure 22 below shows a list of EISD regulatory elements relating to water services, which the WSR&PD subunit is responsible for.

Elements of water services regulation to be overseen by EISD, WSR&PD subunit

1. Access to basic services (water and sanitation)
2. Drinking water quality
3. Impact on the environment
    - License status of waste water works requirement and this includes wastewater meeting the license compliance of 97% (effluent quality)
4. Strategic Asset Management
    - To ensure that Asset management of JW is in place
    - Monitoring
5. Water use efficiency
    - Water demand management
    - Meter reading performance
    - Unaccounted For Water
6. Customer service standards
    - Continuity of water supply: number of interruptions of greater than 6 hrs, 24hrs, and 48hrs per incident (Response time)
    - Continuity of water supply: pipe burst per annum per 100km of water and sewer networks

Figure 22: Elements of water services regulation
Source EISD Internal document, undated. Emphasis mine.

The regulation of water services in terms of basic services is derived from the Water Service Act (1997) and is administered by the national Department of Water and Sanitation (DWS). In the City, the Deputy Director for WSR&PD is responsible for access to basic services. However, there are no corresponding equivalents upon which senior managers can be held responsible for access to basic services. It was strange that this KPI was located at a rather low level of the bureaucracy and not at the senior managerial level with performance contracts. Whether this was deliberate or an oversight, it could not be established, but it was clear that there were other such instances of policy gaps, where the policy objective of equity was underplayed. An ANT reading of the scenario leads to the conclusion that the actor-network for water service in the City is weak.

8.7.2 Assessment Report – the main tool used by officials in the Water Services Unit

Continuing to track how the City of Johannesburg monitors the equity objective of water provision through the regulation of JW, the study examined the Deputy Director's instruments to perform her tasks. In performing her regulatory function, the Deputy Director relied on JW Quarterly Reports from which she prepared an assessment report

for the ED. Figure 23 below shows part of the assessment report produced by the WSR&PD's Deputy Director.

Measurement	Annual target	Quarterly Target	Actual		Comments
Access to services: Basic Water provision to Informal Settlements	83.89% coverage (2,290 households)	Q1 = 82.64%. Q2 = Q3 = Q4 =	0		***Performance*** In this quarter no households were provided with basic water, Joburg water reported that procurement process is underway.; The tender is anticipated to be advertised in October 2017. ***Regulatory standard*** SFWS requires everyone to have access to a basic water supply by 2008. The City did not achieve this target. ***Evidence*** Report on site visit that was undertaken.
Access to services: Basic Sanitation services to Informal Settlements	39.27% coverage (2,240households)	Q1= 38.05% coverage Q2= Q3= Q4=	0		***Performance*** In this quarter, no households were provided access to basic sanitation as per plan. Again this is due to procurement process that is not concluded yet. It is reported that the tender is anticipated to be advertised in October 2017. ***Regulatory standard compliance:*** DWS requires 100 % provision of basic services which is impossible to achieve. Whilst the Ventilated Pit latrines must have air ventilation and be sealed inside the pit if built in high water table. Joburg Water conformed to this standard. ***Evidence*** Site visits undertaken
Overall Assessment: **1. Basic Water Services Provision to Informal Settlements** No households were provided with basic water and sanitation in the quarter under review					

Figure 23: Part of assessment report submitted to ED for EISD
Source: CoJ Internal documents, 2017

The overall assessment, in this particular 2017 report, was that no additional households living in informal settlements had been provided with basic water and sanitation in the quarter under review.

8.7.3 Nobody's head rolls if performance is poor

There was no evidence to show that officials at this lower level had any obligation to ensure that JW delivers, or could be held responsible for the low performance of the entity in this area. While it is acknowledged that junior bureaucrats are not responsible for ensuring the performance of JW, the fact that they were no clear consequences for JW when it fails to deliver was rather odd. Given the absence of performance management at this level, the Deputy Director was not concerned about how JW performed. In fact, she denied responsibility by claiming that the performance of JW was not within her control and there was no incentive for her to push JW to perform. However, it seems that the situation had not been so in the past. When officials in this capacity held pro-poor views, they could cause JW to perform as seen in the statements below:

> When I am acting, I don't just take the report as given. I scrutinise the report and ask hard questions on why performance is at a certain level. For example, JW can report 95% performance in sanitation and yet we know that there are sewer spills that are happening. So let's say there is a breakdown of the pump station in the north and we are getting sewer spills. In the old days, we would just go ourselves to Joburg Water and say you are polluting the environment. This has to be remedied. What are you doing? We would go and sit with their CAPEX department; we would go and harass their Operations department. (Interview: R2, Deputy Director, WR&B, 2017).

> I guess because I had pro-poor agenda I kind of picked up those things in terms of where I saw the institutional architecture of the utilities, agencies and corporation is problematic in terms of a developmental agenda (Interview: R17, 2019, ex-official, Contracts Management Unit (CMU).

8.7.4 The role of WSR&PD in implementing the City's water policies

It was clear that the role of the WSR&PD Deputy Director was purely administrative. If records of poor performance are not picked up by Section 79 Portfolio Committees, the challenges associated with the provision of basic services remain unresolved. The discussion on the Deputy Director summed up what looked like a gloomy picture of water services regulation in the City. NPM has provided a range of instruments to act as intermediaries for effecting service delivery. However, the City's function of regulating and overseeing JW, was not effectively performed due to weakly inscribed intermediaries. These intermediaries are not explicit in assigning roles to JW, particularly related to equity in delivery. Hence, the very weak way in which services delivery problems are addressed in informal settlements is indicative of the limited importance of equity targets as the driving objective of official performance.

8.8 Conclusion

This chapter brings together the findings from Chapters 5 – 7 to analyse more closely the relationship between the City and JW with a view to answering the 'who' governs JW question. Complexities of the governance structure and its difficulties in effectively pursuing the equity goal in water service delivery were explored. It was revealed that City's structure evolved over time and rather than shrinking, actually expanded resulting in a multiplicity of actors whose roles often overlap. Multiple controls have emerged as observed by the many legislative documents that control the City's processes. It has been shown that a multiplicity of documents and their evolution over time have been

responsible for the fuzziness and opaqueness of the water services sector. Very often these documents are poorly inscribed, hence inexplicit, causing actor-networks to be weak. For example, the SDA lacked any quantitative targets or even any mention of equity principles or reference to any clear and identifiable policy document. ANT was useful in exploring the complex relationships between actors and opening several black boxes in the City that would otherwise remain unknown from the outside. ANT also revealed how diffuse the City role as a regulator is, and how difficult it was to local the ultimate point of authority in the City. Many actor-networks act and react against each other. Many officials noted the expansion of the City structure over the years and some applauded the formation of the Group system as a necessary addition. However others were critical of the system as creating unnecessary silos, duplication of effort and excessive reporting.

The chapter notes that the existence of these documents was not without rationale and applying an NPM frame made it possible to put forward an argument that the institutional relationship between the City and JW only serves to highlight the limits of NPM. It was shown that an attempt to achieve efficiency and accountability led to the introduction of numerous controls whose combined effect ran contrary to the desired objectives. Rather, a more complex and opaque governance structure emerged, not easy to navigate resulting in the emergence of informal networks. While several planning documents exist, it was sobering that none were definitive or specified service delivery to poor areas from the GDS to the SDA. There was not clear and deliberate commitment by the City to address equity by focusing attention on informal areas. The blurriness of instruments in specifying who and how JW is regulated caused the researcher to focus on the WSR&PD sub-unit of EISD where access to basic services was listed as an element of regulation that the unit performs on JW. However, it was telling to find that this KPI was aimed at a rather low level of bureaucracy and not at senior managers with performance contracts. Whether this was deliberate or an oversight could not be established, but it was clear that there were other instances of policy gaps where the policy objective of equity was underplayed. An ANT reading of the scenario leads to the conclusion that the City's actor-network for water service regulation whose roots lie in NPM is weak. The equity objective of water policy is weakly inscribed all across the policy instruments from GDS to business

plan and KPIs. The instruments of oversight are partial and fragmented such that they fail to clearly pursue, monitor or act upon equity targets.

9 CONCLUSION

This thesis was motivated by a personal encounter with the City of Johannesburg Metropolitan Municipality. The encounter triggered a double puzzle that required solving (Chapter 1). The first part of the puzzle was concerned with the configuration of the City's water services governance structure and the second concerned the location of the agency for monitoring and regulating Johannesburg Water. In the mind of the researcher, this experience challenged the dominant narratives on water governance in the City of Johannesburg. These narratives treat the City as a unified entity and hence responsive, emphasises the right of access to adequate water, hence the poor and marginalised are covered, and acclaim the Constitution and its legal framework as the guarantor or enabler of service delivery efforts at the local level. In spite of robust legal framework, it is well established that social justice has not been fully achieved as water delivery to the poor is still insufficient. At the same time, the City of Johannesburg has over managed to keep the majority of its residents supplied with water, implying some degree of efficiency. However, it is well established that service delivery at the local level in South Africa is generally very poor. Municipalities and their officials have shouldered the blame but without specific details of exactly who is responsible. As argued in this thesis, this stems from a lack of systematic empirical tests of how the NPM led reforms have impacted the configuration of municipal administrations and processes. The thesis, therefore, set out to answer the question of who governs water services in the City and more specifically who governs Johannesburg Water?

9.1 Restating the research questions and propositions

The following were paused as the research questions to guide the study and make three propositions to prefigure the results.

9.1.1 Research questions

The main research was stated as:

What is the City of Johannesburg's policy guiding its delivery of water services and how it is implemented through regulating and monitoring its delivery entity, JW? This was followed by three sub-questions:

- With a focus on water services, how has the governance structure evolved since 2000?
- Who defines water strategy and how in the CoJ?
- How do the key actants exercise the oversight function of Johannesburg Water in relation to the City's water policy?
- To what extent is CoJ able to exert oversight over JW as its operating arm, given the fact JW pursues efficiency objectives (including cost-recovery) which might be in tension with equity objectives?

9.1.2 Propositions

Based on these frameworks the thesis succeeded in conforming to the propositions stated in Chapter 1 which are restated here as follows:

- The quest for a suitable corporate structure since the early 2000s has led to a hallowed out and fragmentary City bureaucracy.
- A fragmented bureaucracy coupled with loosely inscribed policies and plans have left the City without a clear governing capacity for water governance in Johannesburg.
- The nature of water services governance in the City and the pursuance of efficiency in delivery have stifled the equity objective.

9.2 Key findings

This thesis has explored the governance of water services in the City of Johannesburg. According to national legislation, the City as the Water Service Authority has the main task of developing a water services strategy. This strategy is informed by national policy legislation, population size, and financial resources at the disposal of the City. It was evident that the national government is key player in the determination of water services policy and exerts considerable influence on local municipalities through various departments and policy instruments. Through the Constitution, water was elevated to the status of basic right resulting in the promulgation of several pieces of national legislation designed to implement this right, including the 1994 White Paper on Water and Sanitation. The City of Johannesburg is a "Water Services Authority", meaning it is constitutionally

responsible for delivering water services in the city, and does so by setting up structure and systems as required by law, interpret and implement national water policy while taking account local circumstances such as the nature and size of the economy, population size, water sources, poverty and inequality. Within the City, there are several actors involved in the governance of water services and EISD takes a leading role in developing policy related to water services through research and monitoring while the Mayor and the Mayoral Committee decide in the overall strategic direction.

Three main documents that outline the strategic intent of the City: the GDS, the IDP and the WSDP. These documents link with each other in that the GDS set out the overall aspiration of the City over a long-term period while the IDP breaks that down into a five plan of what can be achieved over that period as a contribution to the long term vision. The Water Service Development Plan goes into detail in terms of programmes and projects pertaining to the water sector over a five-year period. The SDA performs the role of translating the obligation of delivering services to JW. However, an analysis of the SDA document shows that it mostly a process document that guides JW in terms of the requirement relating to planning, implementing and reporting and what documentations must by produced. It was found to be blurry in terms of what JW needs to achieve in terms of service delivery, particularly to poor communities.

With respect to equity, it was quite clear that the equity objectives are strongly inscribed as principles in the constitution and in national legislation and in the DWS documents. However, DWS's role on monitoring is not very strong compared to National Treasury which places emphasis on legal and financial issues and not equity. Given that National Treasury is a major source of municipal finance, its prescriptions are far more inscribed in City's practices than the equity objectives developed by DWS. By applying the ANT approach and analysing City policy document, the thesis found that water equity targets are weakly inscribed in COJ water policy and appear less of a priority.

With JW providing water services on behalf of the City, the issue of oversight was primary in the governance of water services. While there are numerous bodies within the City that

perform the oversight function. The resultant complex actor-network is linked together with rather weak intermediaries in the form of regulatory instruments, legislation and planning documents that assign roles and shape relationships. Because they are poorly inscribed, the actor-network created is not strong enough to effectively hold the entity to account. Additionally, the City's interests of ensuring access to water by all remain in direct tension with the profit motive of the entity, with more attention given to financial balance sheet and audits than to equity objectives. The bulk of their work consisted of endless reporting and duplicating each other's effort. In addition, the various oversight functions are dispersed across the City and operate in a siloed way. The emphasis on financial accountability, which is no doubt crucial, has overshadowed equity objectives.

9.3 Research approaches

In order the answer these questions the thesis applied Actor-Network Theory (ANT) as a heuristic tool for understanding complex socio-technical processes in concert and placing emphasis on relationships between human and non-human actors. New Public Management was used as a theoretical lens for viewing and explaining the structure and processes of water services governance in the City of Johannesburg. The thesis makes inferences from the concept of real governance in order to direct attention to the inner workings of state bureaucracies and to avoid the political science biases of describing African bureaucracies as a priori inefficient. Ultimately, the thesis added ethnography as part of the methodology over and above the in-depth interviews and documentary analysis. An ethnographic approach to governance is not common and is a stimulating methodological innovation in the South African context.

9.3.1 Actor-Network Theory and the hallowed state

One of the objectives of this thesis was to paint a picture of the current configuration of the City's administrative structure with specific reference to water services. ANT was a useful tool for achieving this task. Its uniqueness as an innovative research technique made it possible to simplify the complex, messy, and ephemeral reality of local government in South Africa with reference to the City of Johannesburg. The technique unveiled the reality of how water services governance is performed by a multiplicity of

actors and through a variety of practices. As required by ANT, the thesis took account of the broader contextual issues surrounding the relationship between the City and its corporatised entity to provide a nuanced and unique account of this relationship, not found in other accounts. Proponents of ANT strongly believe that many actors are locked into networks specific elements of which influence their actions, reside outside of the focal organisation. Therefore, in applying ANT, a more nuanced understanding of formal governance processes in the City was developed and the complexity, fuzziness and fragmentary nature of local government institutions and processes were exposed.

The actor- network theory has enabled the researcher to capture a systemic picture of how reporting and monitoring work for Johannesburg Water. The study moved beyond mere examination of the logic of the structures of legislation and how they function to identify and locate the agents who interpret this legislation, and showed how the intent of the legislation can substantially vary when put into practice through varying interpretations of norms and standards. By unpacking the reporting structures through the EISD and the Group Governance, the study revealed where the system of reporting has faltered by preventing any single person or unit from overseeing the performance of JW as a whole.

The thesis found out that over the years, the number of both human and non-human actors that were responsible for a form of oversight on JW in the City expanded. When obligations set by national departments are included, the study revealed a very extensive water governance landscape which thesis label the Actor-Network of Water Services in the City of Johannesburg. The layers of bureaucracy to be traversed, each with its respective alignment to relevant legislation or controls from the national government, shows the extent to which the state has become hallowed. Even JW itself outsources the analysis of how utility progressing in its Key Performance Indicators to a consulting firm, KPMG.

9.3.2 New Public Management and the governance paradoxes

This research acknowledges that NPM reforms in the City of Johannesburg were not an isolated phenomenon but were part of national policy at the time. The ANC-led

government had to make a choice between retaining the apartheid bureaucracy or undertaking a complete overhaul as argued by Chipkin and Lipietz (2012) and Fraser-Moleketi (2006). The government chose the former as a way of transforming public service and adopted an NPM approach (Chipkin and Lipietz, 2012). The Constitution of 1996, the 1998 White Paper on Local Government, Batho Pele, and the GEAR policy of 1996, all combined to introduce NPM approaches into public service, particularly at the local level. The central thrust of the NPM reforms was to improve the efficiency and responsiveness of government while ensuring that service delivery objectives are met as argued by the World Bank (2004), Hood and Peters (2004) and Kettl (1997).

However, NPM reforms have inherent contradictions that are not easily solved in the South African context. In particular, the shift in responsibility from politicians to managers depoliticises the management of the public services hence insulating service delivery issues from any form of political interference (Herrera and Post, 2014). By separating administrative issues from political influence, politicians are restricted to setting general policy goals while managers gain considerable freedom to interpret the rules and make decisions on service delivery. Politicians, and particularly local councillors are rendered ineffective, ultimately causing the public to undermine the legitimacy of local government. This creates conflict where politicians demand that social goals be prioritised while public managers working on a performance-based contract largely emphasise organisational efficiency. Hence, rather than becoming depoliticised, public management becomes even more politicised as politicians influence the appointment of senior managers to avoid loss of control of the implementation process (Maor, 1999; Herrera and Post, 2014). A good example observed in this thesis was the move by the EFF party to oppose the appointment of White Executive Directors in spite of merit, preferring their Black counterparts as part of reversing the prejudices of apartheid.

Rather than eliminate bureaucracy as predicted by Osborne and Gaebler (1992), NPM reforms and their emphasis on results have retained and augmented process controls over bureaucracies leading to an increase in the regulation of public bureaucracies. Several authors such as Jones and Thompson (1999), Hoggett (1996), and Hood and

Peters (2004), report the same, and this thesis confirms it in the case of the City of Johannesburg. Many a time, the City's administration was found to be bureaucratic and process-driven; something that NPM was meant to displace (McKinnon, 2003; Hood and Peters, 2004). This confirms what Hibou (2015) calls a shift from a logic of means to a logic of results so that rather than shrinking, the bureaucracy has expanded. The frequent alterations to the bureaucratic structure in the City since 2000 tended to cause each administrative phase to overlap sediments as new institutions were created and old ones either become redundant or remained active overlapping mandates as argued by Sion and Huber, (2013) and Cooper et al., (1996). This thesis found many independent units that perform more or less similar tasks such as EISD and Group Governance, resulting in blurred lines of responsibility.

This thesis also proved false the assumption that all public services can be specified, measured, and assigned to specific individuals. It was observed that work packages were split into several tasks and assigned to multiple actors to the extent that, management responsibilities become blurred, individual relationships became fragmented, and there is duplication of effort which has actually led to non-accountability as argued by Gregory (1995), and Minogue (2000). One of the main findings of the thesis is that when it comes to water services, accountability is lost due blurriness in terms of lines of authority.

Hence, it is concluded that simultaneous pursuance of efficiency and social justice goals in the City of Johannesburg has caused the City to fall victim to the paradoxes of NPM-led reforms. The quests for efficiency, rather than reducing controls increased the latter resulting in a large and complex bureaucracy. The focus on efficiency has caused a shift away from equity goals that matter most from both social-justice and political perspectives as argued by Smith (2003), and Harrison, (2006). The study found that the provision of basic services to poor and marginalised communities is not explicitly stated in the City's planning documents making the City less accountable to the public. NPM could serve as the solution to accelerate service delivery, however; its tenets run contrary to social justice and democratic accountability objectives. It fragments implementation, diffuses authority,

and ultimately weakens the state. In spite of that weakness, the City has generally high levels of water service delivery over the years.

9.3.3 Institutional ethnography and the missing state

The question of who governs water services in the City of Johannesburg or more concretely, who governs Johannesburg Water, does not yield a definite and straightforward answer. Rather, the answer depends on the identity of the respondents, their perspectives and the perceptions they hold. Governing water services is a phenomenon that requires careful and objective observation to generate an ordered account of the truth. The recommendation is that the researcher needs to cut through the maze of bureaucracy, discover its workings, both formal and informal, and untangle its contradictions and complexities (Bierschenk and Olivier de Sardan, 2019; Munoz, 2018). Simply put, one needs to undertake ethnography and this study adopted ethnography as a methodological approach. Ethnography has the added advantage that apart from physical involvement in the phenomena, one gets to use standard data collection techniques such as interviews, observation, and documentary analysis; data analysis is a continuous process that need not wait for fieldwork to cease.

Given that the focus of the study was on the structure and bureaucracy of the City, ethnography was best suited since it supports the exploration of bureaucratic spaces as sites of culture and practice. As argued by Bierschenk and Oliver de Sardan (2014), bureaucracies are made up of public employees whose day-to-day functioning and practices deserve ethnographic scrutiny and cause the researcher to venture into places and spaces where bureaucratic work happens (Muñoz, 2018). Through ethnography, this study was able to sort through the contradictions and complexities found in modern public bureaucracies as exhibited in the City of Johannesburg. Bureaucrats were transformed into ethnographic subjects and not executors of policy, and this opened more lines of inquiry regarding the character of and practices within bureaucracies as argued by Bierschenk and Olivier de Sardan (2019). Ethnography placed an end to speculations about state bureaucracies and state officials, and the reality of water services governance was revealed with greater nuance as argued by Bierschenk and Olivier de Sardan (2019)

and Muñoz (2018). The main finding based on this methodological approach was that the state was everywhere and yet nowhere.

Despite being immersed in the City and interacting with officials, attending meetings and engaging in corridor caucusing, it was not clear who exactly was ultimately responsible for water services delivery in the City. An analysis of City planning documents, reports, and even performance management documents could not reveal the individual who shoulders the blame if JW fails to perform, nor who should take action in particular instances. Whose head rolls? We are jointly and severally responsible; she is doing a bit, we are doing a bit, the City Manager is doing a bit, clearly, there is no one person who is the Water Services Authority, we are all. Everyone is waiting for the other one to drive the goal home. It muddies the water. These are all statements used by officials (Chapter 7) which indicate that even among City officials, no one is sure who is responsible and accountable for water service delivery and JW. Institutional ethnography did not solve the puzzle either, but rather exposed a reality that would otherwise have remained hidden, and demystified some truths that are generally taken for granted. The study found that the City had in a performance management system that was functional only for the executive management and poorly applied to the rest of the organisation. Officials complained of duplication of effort, silo mentality and excessive reporting which has been reduced to mere quantity without strict debates on what constitute service delivery, equity nor the sufficiency service levels.

9.4 Concluding note

This thesis has shown that NPM has introduced distortions in the governance of public services at the local level, the marginalisation of the poor has persisted as the states prioritises efficiency over equity in delivery. NPM has introduced numerous controls that have left the state appears fatigued and indifferent to the plight of the poor. On the one hand, JW is not keen on providing services in poorer areas where revenue is not collected, while on the other hand, the City is not explicit in committing formally to the servicing of informal areas due to rising number of informal settlements and for that residents here can legally demand services. The case of the- City of Johannesburg water

services sector, triggers the question on whether the state should claim back its role publicly providing services. Given the distortions introduced by NPM, is appears impossible, but if NPM-inspired models remain, the position of the poor needs to be revisited if the state is to uphold equity and social justice principles.

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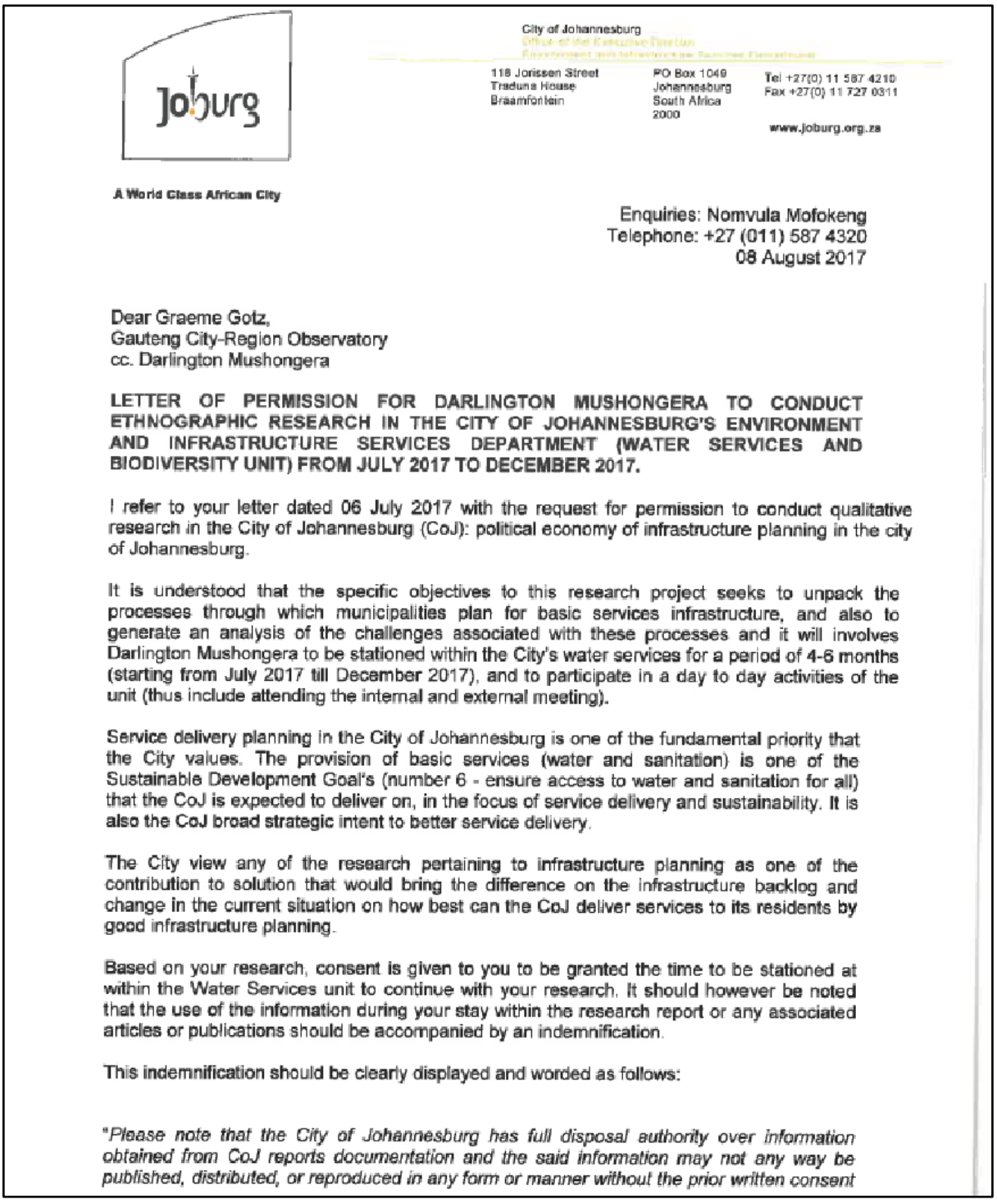
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List of interviewees

1. Salatial Chikwema – R1 – Director Monitoring and Evaluation. GSPCR
2. Jane Eagle – R2 – Deputy Director Open Space Planning, WRandB – EISD
3. Graeme Gotz – R3 – Director Research. Ex-official CoJ Central Strategy Unit
4. Philip Harrison – R4 – Ex-official – Executive Director CoJ Spatial Planning
5. Kate Joseph – R5 – Official GSPCR
6. Jak Koseff – R6 – Former Advisor to Executive Mayor – CoJ
7. Freddie Letsoko – R7 – Deputy Director – Catchment Management WRandB – EISD
8. Peter Magni – R8 – Ex-official – CoJ Spatial Planning
9. Antonino Manus – R9 – Ex-Director WRandB – EISD
10. Gillian Maree – R10 - Senior Researcher and Water expert – GCRO
11. Ina Mkoka – R11 – Ex-Official Joburg Water – office of the Managing Director
12. Takalani Mmbara – R12 – Deputy Director Monitoring and Evaluation. GSPCR
13. Nomvula Mofokeng – R13 – Deputy Director WSRandPD – WRandB – EISD
14. Mthokozisi Ncube – R14 – Ex-official Joburg Water – Innovation
15. Rashid Seedat – R15 – Ex-official CoJ Central Strategy Unit
16. Lunelle Serobatse – R16 – Acting Executive Director – EISD
17. Laila Smith – R17 – Ex-official Director Contracts Management Unit (CMU)
18. Shuaib Suleman - R18 – Finance Director EISD
19. Ondela Tywakadi – R19 – Principal Specialist WSRandPD, WRandB – EISD
20. Zizi Khona – R20 – Advocate – Group Governance
21. Leonard Baloyi – R21 - Principal Specialist WSRandPD, WRandB – EISD
22. Jabu Dlamini – R22 – Deputy Director GSPCR
23. Kathy Eales – R23 – Ex-Director – CMU
24. Philip Harrison – R24 – Ex-Director – Spatial Planning CoJ.
25. Nazira Cachalia – R25 – Director – JMPD, CoJ
26. Graeme Gotz – R26 – Ex-Director – Central Strategy, CoJ
27. Michael Sachs – R27 – Ex-Director – National Treasury
28. Pule Makena – R28 - Senior Specialist, Water Quality.
29. Nendy Manzini – R29 – Specialist Catchment Management
30. Jan Erasmus – Director – Group Strategy, GSPCR)
31. Christa Venter – Chief Operations Officer - Pikitup
32. Flora Mokgola – R32 – ex-Advisor to Mayor – Environment)
33. Tinashe Mushayanyama – R33 – ex-Deputy Director, Data and Strategic Information

ANNEXURES

Annexure 1: Letter of approval to conduct research



City of Johannesburg
Office of the Executive Director
Environment and Infrastructure Services Department

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A World Class African City

Enquiries: Nomvula Mofokeng
Telephone: +27 (011) 587 4320
08 August 2017

Dear Graeme Gotz,
Gauteng City-Region Observatory
cc. Darlington Mushongera

LETTER OF PERMISSION FOR DARLINGTON MUSHONGERA TO CONDUCT ETHNOGRAPHIC RESEARCH IN THE CITY OF JOHANNESBURG'S ENVIRONMENT AND INFRASTRUCTURE SERVICES DEPARTMENT (WATER SERVICES AND BIODIVERSITY UNIT) FROM JULY 2017 TO DECEMBER 2017.

I refer to your letter dated 06 July 2017 with the request for permission to conduct qualitative research in the City of Johannesburg (CoJ): political economy of infrastructure planning in the city of Johannesburg.

It is understood that the specific objectives to this research project seeks to unpack the processes through which municipalities plan for basic services infrastructure, and also to generate an analysis of the challenges associated with these processes and it will involves Darlington Mushongera to be stationed within the City's water services for a period of 4-6 months (starting from July 2017 till December 2017), and to participate in a day to day activities of the unit (thus include attending the internal and external meeting).

Service delivery planning in the City of Johannesburg is one of the fundamental priority that the City values. The provision of basic services (water and sanitation) is one of the Sustainable Development Goal's (number 6 - ensure access to water and sanitation for all) that the CoJ is expected to deliver on, in the focus of service delivery and sustainability. It is also the CoJ broad strategic intent to better service delivery.

The City view any of the research pertaining to infrastructure planning as one of the contribution to solution that would bring the difference on the infrastructure backlog and change in the current situation on how best can the CoJ deliver services to its residents by good infrastructure planning.

Based on your research, consent is given to you to be granted the time to be stationed at within the Water Services unit to continue with your research. It should however be noted that the use of the information during your stay within the research report or any associated articles or publications should be accompanied by an indemnification.

This indemnification should be clearly displayed and worded as follows:

"Please note that the City of Johannesburg has full disposal authority over information obtained from CoJ reports documentation and the said information may not any way be published, distributed, or reproduced in any form or manner without the prior written consent

of the COJ. Should permission be granted by CoJ for the use of the data in any form of media, the applicant shall give full acknowledgment to CoJ as the source owner of the said information. Any further so acknowledged shall in no way reflect views, opinions or decisions by Council either expressly or otherwise. The City does not in any way warrant the correctness of the information provided and cannot be held for any claim, injury or death which may arise out of or as a result of the provision or use of the information by any other person."

It would be appreciated if you could share with us the research as soon as it has been concluded.

Please confirm your acceptance of these conditions. We wish you success with your research.

Sincerely,

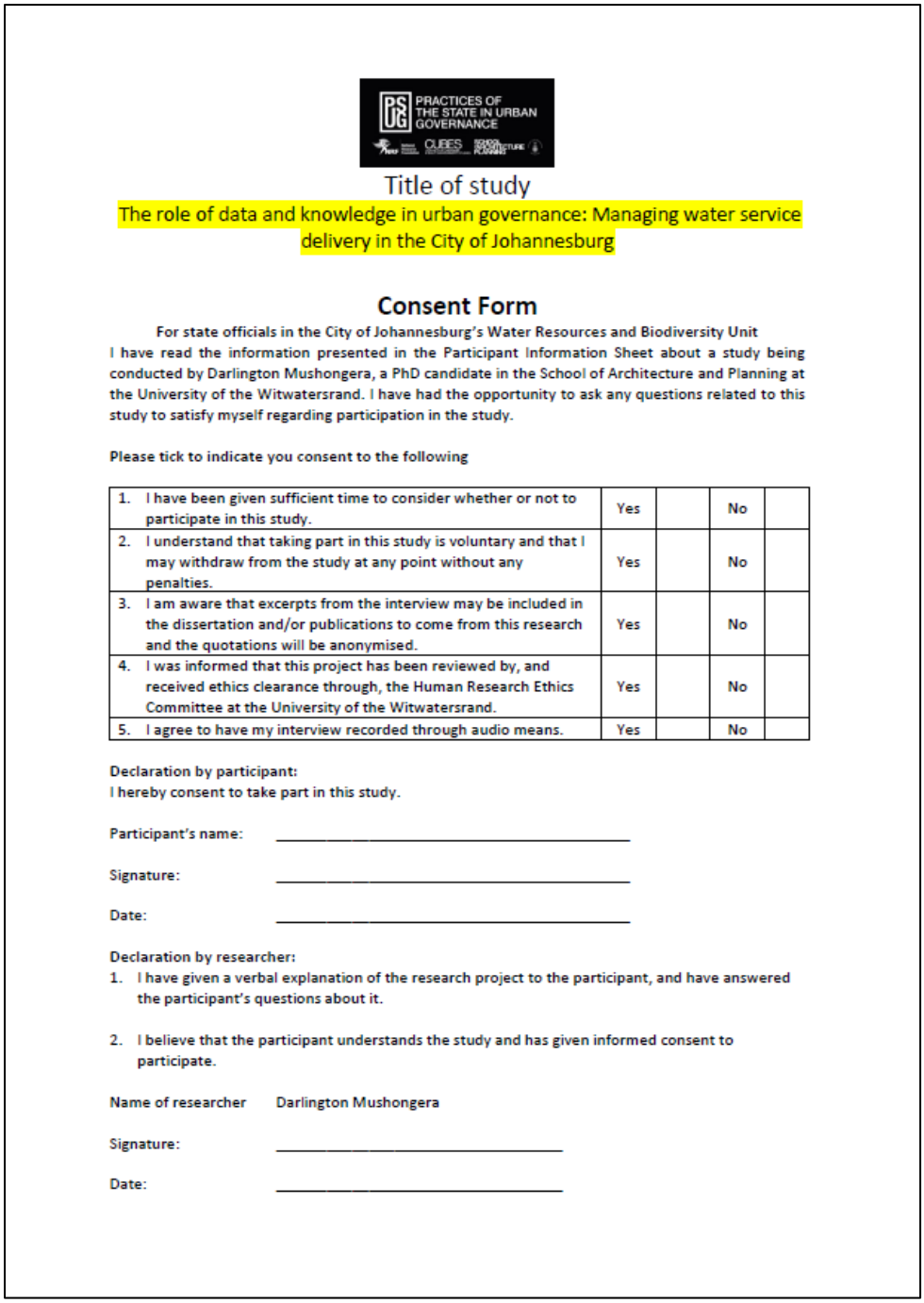
Lunelle Serobatse
Acting Executive Director: Environmental Management and Infrastructure Services

DATE: 17.08.2017

Annexure 2: Recorded interview time

Name of respondent/meeting/discussion	**Duration in minutes**
Antonino Manus	61,36
EISD Budget Meeting	70,54
EISD emergency budget meeting	30,29
Flora Mokgohloa	28,36
Freddie Letsoko	40,52
Gillian Maree	53,47
Graeme Gotz	122,89
Ina Mkoka	57,33
Jabu Dlamini	35,86
Jak Kosef	99,57
Jan Erasmus	23,43
Jan Erasmus - Planning Cycles	23,18
Jane Eagle	65,20
Laila Smith	12,42
Leonard Baloyi	50,00
Lunelle Serobatse and Nomvula Mofokeng	67,39
Lunelle Serobatse	207,90
Mayor Mashaba at EISD	88,17
Nendy Manzini	36,51
Nomvula Mofokeng	66,25
Ondela Tywakadi and Leonard Baloyi	83,58
Ondela Tywakadi	55,55
Peter Magni	27,50
Phil Harrison	106,00
Pule Makena	96,58
Rashid Seedat	50,34
Salatial Chikwema	32,24
Blue Drop Assessment meeting	19,37
Suleman Shuaib	231,11
Takalani Mmbara	72,77

Annexure 3: Sample consent form



PRACTICES OF THE STATE IN URBAN GOVERNANCE

CUBES

Title of study

The role of data and knowledge in urban governance: Managing water service delivery in the City of Johannesburg

Consent Form

For state officials in the City of Johannesburg's Water Resources and Biodiversity Unit

I have read the information presented in the Participant Information Sheet about a study being conducted by Darlington Mushongera, a PhD candidate in the School of Architecture and Planning at the University of the Witwatersrand. I have had the opportunity to ask any questions related to this study to satisfy myself regarding participation in the study.

Please tick to indicate you consent to the following

1. I have been given sufficient time to consider whether or not to participate in this study.	Yes		No	
2. I understand that taking part in this study is voluntary and that I may withdraw from the study at any point without any penalties.	Yes		No	
3. I am aware that excerpts from the interview may be included in the dissertation and/or publications to come from this research and the quotations will be anonymised.	Yes		No	
4. I was informed that this project has been reviewed by, and received ethics clearance through, the Human Research Ethics Committee at the University of the Witwatersrand.	Yes		No	
5. I agree to have my interview recorded through audio means.	Yes		No	

Declaration by participant:
I hereby consent to take part in this study.

Participant's name: _____

Signature: _____

Date: _____

Declaration by researcher:

1. I have given a verbal explanation of the research project to the participant, and have answered the participant's questions about it.

2. I believe that the participant understands the study and has given informed consent to participate.

Name of researcher Darlington Mushongera

Signature: _____

Date: _____

Ethics approval reference - H17/06/39 Mushongera (Mr.)