WATER SHORTAGE SOUTH AFRICA

OUTA
ORGANISATION UNDOING TAX ABUSE

APRIL 2019

POSITION PAPER FOR AN INDEPENDENT WATER REGULATOR

A COLLABORATION REPORT BY OUTA AND WATER SHORTAGE SA

Compiled by:

Yamkela Ntola,
OUTA Portfolio Manager for:
Water and Environment
Email: siqhamo.ntola@outa.co.za

Benoit Le Roy
CEO, Water Shortage SA
Email: benoit@watershortagesa.com

CONTENTS

ABBREVIATIONS

AGSA	Auditor-General of South Africa
AMD	Acid Mine Drainage
APP	Approved Professional Person
AU	African Union
CMA	Catchment Management Area
DEA	Department of Environmental Affairs
DMR	Department of Mineral Resources
DWS	Department of Water and Sanitation
EIA	Environmental Impact Assessment
IWR	Independent Water Regulator
MTSF	Medium-Term Strategic Framework
NDP	National Development Plan
NWA	National Water Act 36 of 1998
NWRS2	Second National Water Resource Strategy
OUTA	Organisation Undoing Tax Abuse
SARB	South African Reserve Bank
SCM	Supply Chain Management
SDGs	Sustainable Development Goals
TCTA	Trans-Caledon Tunnel Authority
UNGA	United Nations General Assembly
WSAU	Water Service Authority
WSA	Water Services Act 108 of 1997
WSI	Water Service Intermediaries
WSP	Water Service Provider
WTE	Water Trading Entity
WWF	World Wide Fund for Nature
WWTW	Waste Water Treatment Works

TABLES

1. INTRODUCTION

The purpose of this document is to articulate the position and rationale for the Organisation Undoing Tax Abuse (OUTA) and Water Shortage South Africa's ("Water Shortage SA") call for the establishment of an Independent Water Regulator (IWR) in South Africa.

At a high level, the following section provides the abovementioned position with the rationale contained in the appendix below. The appendix commences by providing the vision, mission and reasons for collaboration between OUTA and Water Shortage SA on this campaign. It then moves on to briefly describe South Africa's water problem and then provide an overview, and where appropriate, a discussion on the governance frameworks applicable to water regulation. Flowing from here, the document juxtaposes the Department of Water and Sanitation's (DWS) declared achievements on water regulation with the shortcomings identified by OUTA and Water Shortage SA.

2. OUTA AND WATER SHORTAGE SA'S POSITION ON AN INDEPENDENT WATER REGULATOR IN SOUTH AFRICA

South Africa's water sector is inadequately regulated. This has the potential to contribute significantly to economic decline in the face of water induced capital constraints, not least of all our country's food security. The Department's shortcomings (see table 3 below) in regulating South Africa's water sector requires serious and effective intervention and according to OUTA and Water Shortage SA, establishing a regulator independent from the Department is a solution that both organisations agree on. At this juncture, it is important to make clear that it is not OUTA and Water Shortage SA's position that South Africa's water sector be denationalised and/or privatised, but rather that there be effective regulation through an IWR.

Leaning on the Department's own estimates, nearly a R1 trillion investment over the next 10 years is required for water and sanitation infrastructure aimed at meeting South Africa's water and sanitation needs. In South Africa's current economic climate and mindful of the "bail-outs" that have regularly precipitated State-owned entities; it would be unconscionable to expect the tax payer to shoulder this additional burden. A viable option for raising such capital is through private funding or public-private partnerships (PPP), which will require critical non-negotiable preconditions that include policy and regulatory certainty insulated from party-political considerations. Securing such capital under the Department's regulatory climate is highly unlikely.

The Department's 2018/19 Budget Vote Speech identifies the need for a "National Water Resources and Services Regulator: RSA" as among the initiatives to be undertaken if the Department is to be successful in addressing its challenges. For OUTA and Water Shortage SA, identifying this need points to the Department's shortcomings as the regulator of the water sector. With that said, OUTA and Water Shortage SA agree, in principle, with the initiative to put a regulator in place. However, it is the position of OUTA and Water Shortage SA that such regulator must to be *independent* from the DWS. This is to say, that South Africa's IWR must be an

> "institution which is able to abide all the time with sound basic regulatory principles such as clarity of mission and purpose, integrity, accountability, effectiveness, objectivity and a professional technical capacity to fulfil all its assigned functions. Further, it must act in a professional manner without fear of political interference with the aim of fulfilling the objective of acting in the public interest through the sustainable management of water services".[1]

It is important to note that the notion of a regulator that is independent from a government department is not new to South Africa. In fact, the South African government recognises it as international practice and demonstrates its alignment through its established regulatory agencies in areas such as energy and telecommunications. As such, a similar approach is not outside the realm of possibility for the water sector when considering South Africa's development framework. In fact, it is aligned with South Africa's development plan.

The independence of an institution of this nature will not only ensure regulatory certainty but remove the influence of political cycles from its functions. Furthermore, and perhaps more importantly, it will aptly contribute towards executing the State's constitutional mandate with regards to water, which, among other things, includes providing sufficient safe drinking water to people in the Republic. It is also important to note that industries which drive South Africa's economy (such as agriculture, energy, mining and manufacturing) and are pivotal for its further development are dependent on the sufficient access to water. Therefore, effective independent regulation of the water sector will mean that the resource is recognised and positioned as an economic enabler that will aid socio-economic development.

Considering South Africa's weak economic prospects and severe constraints in skilled human capacity, a realistic approach is required for establishing an IWR. Mindful of the financial challenges confronting the DWS, OUTA and Water Shortage SA recommend a phased approach in introducing an IWR. In other words, passing on those under-performing functions under the regulatory function of the DWS to the newly established independent institution.

The proposed phased approach may include, *inter alia*:

- that the DWS only functions in its role as a shareholder of water boards and not interfere in the regulation of tariffs and the performance of water boards;
- regular reports are published and put open for peer review. As a start the Blue and Green Drop reports from 2015 onwards should be released to the public; and
- the creation of mechanisms where civil society and the public can participate in decision making with the regulator. International examples such as advisory boards or committees can be explored.

It is important to note that neither OUTA nor Water Shortage SA are campaigning for denationalisation or privatisation of South Africa's water sector, and that in no way will the organisations prescribe the functions of the envisioned regular, as we believe those functions should be developed following extensive engagements with stakeholders, which OUTA and Water Shortage SA are in the process of undertaking.

APPENDIX

1. VISION, MISSION AND COLLABORATION BETWEEN OUTA AND WATER SHORTAGE SA

1.1 Vision and mission

OUTA and Water Shortage SA envision a water sector that is an economic enabler and serves the interests of all South Africans. A regulator that is independent from the DWS will catalyse this vision.

Our mission is to champion and realise our goal for an independent regulator to ensure regulatory certainty as an enabler for sustainable economic and socio-economic development in South Africa.

1.2 Collaboration between OUTA and Water Shortage SA

OUTA is a proudly South African non-profit civil action organisation. It comprises of and is supported by people who are passionate about improving the prosperity of our nation and sustaining the environment. OUTA was established to challenge the abuse of authority, particularly the abuse of taxpayers' money wherever it arises.

Water Shortage SA was established to raise the awareness of water shortages in South Africa and to facilitate the resolution of this unsatisfactory state of affairs via multiple initiatives from grass roots to national levels. These initiatives are generally to address and unlock the causes of water shortages through the implementation and proliferation of the "paradigm of abundance" as opposed to the current very pedestrian and outdated "paradigm of scarcity" that limits solutions and economic growth.

In light of the myriad of challenges in South Africa's water sector, and the adverse impacts that have ensued; it is the position of OUTA and Water Shortage SA that a regulator, independent from the DWS is among the solutions required for the effective and sustainable management of South Africa's water resources. As such, this position and the campaign that is to follow aims at aiding policy certainty on the regulatory functions housed within the DWS, and thereby enable the water sector to attract the much-needed funding required to recapitalise the sector.

Accordingly, the envisioned impact of an IWR speaks to the respective mandates of OUTA and Water Shortage SA, thus the decision to pool our intellectual resources in this regard. On the one

hand, OUTA having been established primarily to challenge the abuse of tax payers' money, aims to ensure that the presence of an IWR will not only halt the abuse of tax payers' money in the water sector, but ensure the efficient and effective utilisation of such resources. On the other hand, Water Shortage SA sees the presence of an IWR as necessary for shifting South Africa's water management paradigm from one of scarcity to one of abundance, which requires among other things, sustainable management of the resource.

Both organisations believe that the establishment of an IWR will, among other things, effectively address regulatory issues in South Africa's water sector. It will also ensure that long-term rational scientific considerations, rather than short-term political consideration drive the regulation of the water sector, thereby unlocking and facilitating investment in the sector to ensure sustainable economic and socio-economic development. To this end, below is a brief outline of South Africa's water problems, the applicable governance frameworks as well as the achievements and shortcomings of water regulation in South Africa.

2. SOUTH AFRICA'S WATER PROBLEM

South Africa's water resources are scarce and limited. In 2015, it was estimated that there are just over 1200 kilolitres of fresh water for each person per annum for a population of approximately 42 million,[2] of which most is already allocated. With[3] an increased population since then, the availability of water per person is logically less. In 2016, the World Wide Fund for Nature (WWF) estimated that South Africa's demand would be 17.7 Billion m^3 which exceeds the available reserve as it stands. It also stated in 2016 that South Africa's water availability per person per year is at 843 m^3 with arid countries like Namibia at 2,674 and Botswana at 1,187.[4] Indeed, as submitted by Hubert Thompson,

> "[w]ithin a few years the population growth, developing economy and urgent need to supply water to the millions of people will take us below this level. More water will be needed than could be delivered at a given time and place. The problem of water scarcity is essentially one of conflict between –
>
> - different uses and users in or between catchments;
> - present and future generations;
> - application of human capital resources for water resource development relative to other investments; and economic prosperity and preservation of ecosystems".[5]

Thompson moves on to suggest that the above conflicts "should be resolved through interventions to ensure that the water resources are protected, used, developed, conserved, managed and controlled in such a way to achieve optimum long-term environmentally sustainable, social and economic benefit to society".[6]

In South Africa, the DWS is the custodian of water resources. It is primarily tasked with formulating and implementing policy governing the water sector. Among other things, the Department aims: (i) to make "a positive impact [in South Africa] and its people as custodians of water and sanitation resources, and as innovative and committed partners in the drive for sustainable development;" and (ii) to be service delivery orientated, striving "to get it right the first time, every time, on time – ensuring that citizens are provided with the water and sanitation services they deserve".[7]

Sadly, the Department's less than desirable record in governance has significantly crippled its ability to execute its mandate. For instance, as recent as 23 March 2018, the Auditor-General of South Africa (AGSA) produced a report on the DWS titled "Challenges facing the water and sanitation portfolio". Irregular expenditure, financial viability and fruitless and wasteful expenditure in the DWS are among the matters that were raised by the AGSA. On irregular expenditure, the AGSA found that

> "[i]rregular expenditure continues to significantly increase year on year. The amounts of irregular expenditure incurred could be higher than the amounts currently disclosed in the financial statements, as the DWS and the Water Trading Entity (WTE) were qualified on the completeness of these disclosures. The known irregular expenditure identified by the auditors amounted to R2,4 billion at the WTE, which management refused to disclose in the annual report. The extreme inability of the DWS and the WTE to effectively deal with irregular expenditure has also been noted as a source of concern during recent engagements between the DWS, Scopa and the portfolio committee on water and sanitation. The significant increase can be attributed to continued weaknesses in supply chain management (SCM) both within the DWS and at the water boards, especially those used as implementing agents".

On financial viability, the AGSA found that

> "[t]he DWS did not manage its finances optimally. The DWS overspent on its budget, resulting in unauthorised expenditure. Simultaneously, the accruals increased significantly. The continued rolling of the budget has a negative impact on the DWS's ability to pay creditors on time and also have a negative impact on service delivery. The WTE also exceeded its budget and went into overdraft in their South African Reserve Bank (SARB) account, which does not only show a lack of financial discipline, but also non-compliance with Treasury Regulations. The WTE did not budget appropriately or monitor the conditions of the amounts committed for spending in its budget. Both the DWS and the WTE further engaged in projects that were not budgeted for and exceeded the allocated budget on some of the budgeted expenditure. We noted a concerning practice where the WTE holds back payments to the Trans Caledon Tunnel Authority (TCTA), which could have a negative impact on the ability of the TCTA to service its obligations and – in turn – the guarantees provided by the National Treasury against the TCTA debt".

On fruitless and wasteful expenditure, the AGSA found that

> "[f]ruitless and wasteful expenditure has increased over time in the portfolio. The amount of actual fruitless and wasteful expenditure incurred could also be higher than that disclosed, as the DWS and the WTE were qualified on the completeness of these disclosures. The auditors identified known fruitless and wasteful expenditure amounts at the WTE, which management refused to disclose in the annual report. The significant increase can be attributed to continued weaknesses in the management and monitoring of projects as well as the deliberate acquisition of assets not adequately planned for, and which are then not used".

Approximately three years before the above AGSA report, the Department had informed the Portfolio Committee on Water and Sanitation that, in a period of 10 years, it would need approximately R870 billion as a capital investment in new and existing water and sanitation infrastructure to meet South Africa's needs.[1] Considering the poor state of South Africa's economy, and in particular the dire financial position of the DWS,[8] it would be unreasonable to require a capital injection of this magnitude solely from the fiscus. Attracting this investment will require critical non-negotiable preconditions which will include policy and regulatory certainty that is insulated from party political considerations. On the latter point, it is important to note that the time period in which this injection is required and for work to be undertaken (10 years) will traverse political administrations, thus the need for certainty.

[1] This includes the refurbishment of existing infrastructure. See https://pmg.org.za/tabled-committee-report/2410/.

Water scarcity is significantly compounded by poor governance in South Africa. Should the *status quo* persist, it is unlikely that South Africa will attract the required investment needed to maintain existing water and sanitation infrastructure as well as develop new infrastructure. Accordingly, this will likely contribute to the worsening of service delivery in respect of water, resulting in the DWS and other water entities being incapable of giving effect to their constitutional mandate for providing safe drinking water as well as ensuring equitable access for those industries which drive South Africa's economy and are critical to its further development.

3. GOVERNANCE OF SOUTH AFRICA'S WATER SECTOR

3.1 International frameworks

Generally,[9] the binding international human rights instruments that South Africa has ratified do not expressly provide for the right to water, whether in terms of access or quality.[10] However, they do provide for the right to life, good physical health and wellbeing as well as adequate food, which implies a right to sufficient clean water.[11]

Key non-binding instruments such as "Transforming our world: the 2030 Agenda for Sustainable Development" ("Agenda 2030")[12] and Agenda 2063 echo the provisions of binding human rights instruments. The former instrument was adopted by the United Nations General Assembly (UNGA) (A/Res/70/1) with Agenda 2063 adopted by the African Union (AU).[13]

Agenda 2030 contains the 17 Sustainable Development Goals (SDGs) with 169 targets. In terms of Goal six of the SDGs, the international community of States aims to "ensure availability and sustainable management of water and sanitation for all". By 2030, they aim to, among other things:

- "achieve universal and equitable access to safe and affordable drinking water for all;
- achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations;
- improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally;
- substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity;

- implement integrated water resources management at all levels, including through transboundary cooperation as appropriate; and
- expand international cooperation and capacity-building support to developing countries in water-and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies".[14]

Agenda 2063 captures the aspirations of AU Member States. Among these aspirations is for the continent's prosperity to be based on inclusive growth and sustainable development.[15] Indeed, by 2063 African States aspire to be "amongst the best performers in global quality of life measures".[16] They intend for this to be achieved through strategies of inclusive growth and provision for basic services such as water and sanitation. African States also envision a future where they will have "equitable and sustainable use and management of water resources for socio-economic development, regional cooperation and the environment".[17]

3.2 Domestic frameworks

3.2.1 Constitutional mandate

Pertinent to water, the Constitution of the Republic of South Africa (Act 108 of 1996) ("the Constitution"), under section 24 provides that "[e]veryone has the right to an environment that is not harmful to their health and wellbeing; and to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:

- prevent pollution and ecological degradation;
- promote conservation; and
- secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

South Africa has made a commitment to bring about "equitable access to all South Africa's [water] resources"[18] and take "legislative and other measures to achieve […] water reform […] in order to redress results of past racial discrimination".[19] Further, section 27(1)(b) of the Constitution provides that "[e]veryone has the right to have access to sufficient […] water".

Based on the above provisions, South Africa subscribes to the **"WISER"** framework of thinking, where **W**ater **I**s a **S**ocial and **E**conomic **R**esource. This is because, South Africa's commitment in bringing about equitable access to water extends to those industries whose functions are critical to economic and socio-economic development. Unlike the international instruments to

which South Africa subscribes, it may be argued that the phrase "equitable access to all South Africa's [water] resources" more deliberately envisions the role of industry in South African society. This is because, as suggested by the phrase, such access is not limited to the people inhabiting South Africa but extends to those industries whose functions aid the equitable distribution of South Africa's resources. It is within this framework where the PPP model resides, the execution of which must not limit the above human rights unreasonably and unjustifiably.[20] It is important to note that other than the right to an environment that is not harmful to a person's health and wellbeing as well as access to sufficient water, the right to water is also implicit in the right to sufficient food,[21] the right to life[22] and the right to dignity.[23] On the latter two rights, the Constitutional Court has pointed out their intricate links with other rights in the Bill of Rights and that they "are the most important of all human rights, and the source of all other personal rights […]".[24]

In administering water resources, and relevant to a regulator, section 195(1) of the Constitution provides that "[p]ublic administration must be governed by the democratic values and principles enshrined in [it], including, among others, the following principles:

(a) a high standard of professional ethics must be promoted and maintained;
(b) efficient, economic and effective use of resources must be promoted;
(d) services must be provided impartially, fairly, equitably and without bias;
(e) people's needs must be responded to, and the public must be encouraged to participate in policy-making;
(f) public administration must be accountable; and
(g) transparency must be fostered by providing the public with timely, accessible and accurate information".

In terms of section 195(2), the above principles apply to "(a) administration in every sphere of government; (b) organs of state; and (c) public enterprises".

The National Water Act (96 of 1998) (NWA) and the Water Services Act (108 of 1997) (WSA) are among those Acts that give effect to the above constitutional provisions at a national and municipal level.[2]

[2] The National Environment Management Act (107 of 1998) is also such an instrument which gives effect particularly to section 24 of the Constitution. For present purposes, the document focusses on those key instruments pertinent to water regulation.

3.2.2 The National Water Act (36 of 1998)

The NWA deals with the management and use of the water resources of South Africa including water institutions such as catchment management agencies (CMAs), water use authorisations (the so-called water licences) and the management of water resources in our rivers, dams and underground water resources. The NWA's primary objective is to enable the Minister, the DWS and CMAs to regulate water resources for the benefit of all.

Relevant to water regulation, the NWA provides for the protection of water resources (Chapter 3); water use (includes considerations, conditions and essential requirement of general authorisations and licences) (Chapter 4); the Minister's powers to make regulations (Chapter 6); monitoring and coordination of water resources (Chapter 14); appeals and dispute resolution (Chapter 15); and offences and remedies (Chapter 16).

Regulations that have been promulgated under the Act include, among others, Water Use Registration Regulations,[25] Regulations on Use of Water for Mining and Related Activities Aimed at the Protection of Water Resources;[26] Water Tribunal Rules, and General Authorisations: Rehabilitating a Wetland.

3.2.3 The Water Services Act (108 of 1997)

Local government's constitutional responsibility with regards to water is provided for under the WSA. In terms of the Act, a municipality may be appointed as a water service authority (WSAU), which ensures access to water services[27] for their municipal area but does not "de facto" mean that they must also be the water service provider (WSP), which provides water services to consumers or to another water services institutions.[28] If practical or necessary for any other good reason, they can appoint water service providers (WSPs) and water service intermediaries (WSIs) as their "agents" to do water provision on their behalf, but cannot abscond from their legislative responsibility. In other words, the WSA must ensure that the WSPs and WSIs do such service provision as they are contracted to do.

Relevant to water regulation, the Act provides for standards and tariffs (Chapter 2); monitoring and intervention (Chapter 8); and the Minister's powers to make regulations (Chapter 11). Regulations that have been promulgated under the Act include, among others, the Compulsory National Standards and Measures to Conserve Water;[29] Water Services Provider Contract Regulations;[30] and the National Norms and Standards for Domestic Water and Sanitation.[31]

3.2.4 Relevant policy frameworks

National Development Plan

The National Development Plan (NDP), as accepted by Cabinet, recommends a clear separation of the accountability lines between a minister and the administration (which includes the regulator).[32] It observes that "[m]any of government's best-performing institutions are characterised by stability of leadership and policy approach. However, the lack of clarity about the division of roles and responsibilities between political principals and administrative heads often undermines this stability. […] In South Africa the current approach to appointments blurs the lines of accountability".[33] Generally, South Africa needs to clarify its political-administrative interface as is done in many countries.

Under chapter 4 (Economic infrastructure – the foundation of social and economic development), the Plan, as a key point admits, *inter alia*, that: (i) there is a need to maintain and expand its infrastructure to support economic growth and social development goals. It notes that "[o]ver the past two decades, independent regulatory authorities have been established world-wide to issue licenses, ensure access to networks, set prices and establish technical and service standards".[34] The Plan, in a manner that suggests South Africa's alignment with international practice, makes note of South Africa's regulatory agencies in energy, gas and petroleum, telecommunications and ports. It goes on to state that the aforementioned agencies

> "are tasked with safeguarding reliable and competitive services for consumers, while promoting affordable access for poor and remote households. They are supposed to ensure that utilities and operators are efficient and financially viable so that they can invest in maintaining, refurbishing and extending their networks".[35]

It goes on to declare that "[r]egulation works best where there is sufficient political will to support it; where regulators are legally independent, publicly accountable and their decision-making is transparent, and where the regulator is backed by adequate institutional, and human capacity".[36] Lastly, in this regard, the NDP states that

> "[i]mproved regulatory performance is vital for national development. Capacity building remains a core challenge, requiring sustained training to improve leadership and technical capabilities. The quality of regulation, however, is not just about the regulator. The state itself must have adequate capacity and capability to formulate effective policies; support the design, establishment, review and improvement of regulators; and respond to issues

identified by capable regulators. A capable state (chapter 13), with functioning, well-run utilities, departments and municipalities, will help ensure efficient regulation".[37]

Second National Water Resource Strategy

The Second National Water Resource Strategy (NWRS2) was produced pursuant to Part 1 of Chapter 2 of the NWA.[38] Its purpose is to ensure that South Africa's "water resources are protected, used, developed, conserved, managed and controlled in an efficient and sustainable manner" over the course of 10 years since adopted in 2013.[39]

The Strategy indicates that it responds to priorities set out in the NDP and NWA that support sustainable development.[40] Concerning the regulation of the water sector, it acknowledges that this function is "a critical element for effective, equitable and sustainable water management of resources and the delivery of sustainable and appropriate water services".[41] According to the Strategy, its regulatory principles include:

- **equity**, which includes equity in water access across the water chain, administrative fairness and just processes;
- **predictability**, where there will be reasonable certainty on principles and rules;
- **minimal regulation**, where regulation intervention is kept at a minimum "to deal with the matter being addressed and should avoid unnecessary administrative burdens on regulatory and regulated bodies;
- **transparency**, where there will be easy access to regulatory outcomes;
- **information based**, where water resources, services and institutional information must be publicly available;
- **appropriate institutional operating framework**, where there must be a "separation of operational and regulatory functions to achieve the optimal degree of independence. Absolute independence is seldom possible. The regulatory body must have the capacity to consistently perform professionally, competently and conscientiously";
- **capacity**, where "all regulatory bodies must have adequate capacity and capability to formulate an effective regulatory framework, and to implement effective regulation. Equally, the regulated bodies need sufficient capacity to respond effectively to the regulatory requirements; and
- **comprehensive regulation**, includes comprehensive regulation over the entire value chain, covering water resources, water use, pricing, water services standards and discharge standards.

The Strategy outlines the scope of DWS' regulatory functions and challenges (at the time of publication) which are contained in the table below (see table 1).

3.3 Conclusion

The governance frameworks at an international level reflect the cognizance afforded to the importance of water by the international community of States, not only as essential to human life but also in enhancing it. This is indeed echoed in South Africa's constitutional framework which is given effect to by the NWA and WSA. Unfortunately, the poor execution of the regulatory function under the DWS (see table 3) poses an immediate threat to the health and wellbeing of South Africans and a not to distant threat to the South African economy and development.

The NWRS2 provides sound regulatory principles. However, these principles do not enjoy full practice whilst the regulatory function is housed under the DWS. The NDP, to which the NWRS2 proclaims to give effect to in the water sector, recognises the importance and advantages of independence when it comes to regulating strategic sectors. Considering that the water sector traverses all, if not most of South Africa's strategic economic sectors, an independent institution tasked with regulating South Africa's water sector is within South Africa's framework of thinking with regards to economic and socio-economic development.

Table 1: DWS regulatory function and challenges as of 2013			
No	**Regulatory function**	**Description**	**Challenges**
1	Water use authorisation	Ensuring the equitable and sustainable use of water in the public interest. Water use may be authorised (or permissible) in terms of Schedule 1 of the NWA, a general authorisation, an existing lawful use, or in terms of a water use licence.	These include, among other things: • Streamlining the licencing process to ensure and maintain an efficient, equitable and effective authorisation process and to prevent a new backlog from developing. • Limited capacity to ensure compliance with authorisation conditions has led to high levels of illegal water use, and pollution from various sources, including from municipal wastewater treatment works. • Acid mine drainage (AMD) is a major source of pollution that results from water use practices that were allowed when less stringent conditions were imposed on mine discharges prior to promulgation of the NWA. However, AMD offers an opportunity in that it can become a valuable additional water resource if properly treated and managed. • The proposed mining of gas using hydraulic fracturing techniques, referred to as fracking, can bring enormous economic benefits to South Africa. However, hydraulic fracturing is said to pose a threat to groundwater and to the environment, which has sparked calls for strict regulation. This may entail declaring fracking a controlled activity in terms of the NWA. Exploration is currently on shale and coal.
2	Drinking water quality and wastewater discharge regulation	Ensuring minimum standards for drinking water provision and for wastewater discharge, regulated through programmes such as the Blue and Green Drop certification programmes and through national minimum norms and standards.	There is ongoing pollution of water resources by effluent discharged from malfunctioning municipal wastewater treatment works, and there have been problems with drinking water quality in a number of towns.

3	Infrastructure regulation	Ensuring that water infrastructure is functional, properly operated and maintained, appropriate for present and future needs, meets public health and safety standards and is sufficiently durable for a realistic economic life expectancy. This includes dam safety regulation to ensure the on-going protection of public health and safety in relation to dams with a hazard potential.	While work has been done on the qualifications required for water treatment works operators, the regulation of qualifications for operators and officials in the water sector must be expanded to other critical positions.
4	Dam safety regulation	The DWS undertakes remedial work on departmental dams requiring such, while remedial work on other dams (including private dams) is undertaken by owners of dams that do not comply with one or more of the many safety criteria set in the Dam Safety Regulations.	N/A
5	Economic and social regulation	Ensuring pricing strategy and norms and standards for water service tariffs and adherence thereto.	While economic regulation is an important component of regulation in the water sector and receives substantial attention internationally, particularly in the water services sector, it is a neglected area in the South African context. The current institutional arrangements of the economic or price regulator do not lend themselves to a clear separation of the policy and regulatory roles. Water use charges and water tariffs do not fully achieve their objectives. Prices for raw water have been kept artificially low, which means that the aggregate of revenues collected from the sale of raw water does not cover the cost of supplying the water. Under these pricing conditions the maintenance of infrastructure and the ability to build new infrastructure for augmenting supplies to meet growing water needs has suffered.

4. ACHIEVEMENTS AND SHORTCOMING OF WATER REGULATION IN SOUTH AFRICA

4.1 Achievements

The table below (see table 2) captures the consolidated progress documented by the DWS in water regulation as of 2013 per the NWRS2. The overall regulatory performance as per the Strategy will have to be reviewed. According to the section 5(4)(b) of the NWA, the Strategy must be reviewed at intervals "of no more than five years". Accordingly, 2019 is the latest year that the prescribed review must occur. Interestingly, it may be assumed that the measures proposed to form part of the Department's "Five Pillar Turn-around Strategy" at the Budget Vote 36 last year[42] may form part of the amended or new NWRS.

Following the outcome of his induction sessions as the newly appointed Minister last year, Minister Nkwinti proposed a "Five Pillar Turn-around Strategy" to address issues in the Department which will take effect in the "Medium-Term Strategic Framework (MTSF)" (2019-2024). Among the pillars is a "National Water Resources and Services Regulator: RSA", implying a regulatory issue significant enough to form part of the Department's turn-around strategy. A summary of the issues and Departmental shortcomings on regulations are captured in the table below (see table 3).

Table 2: Progress in regulation as per the NWSR2

No	Description	Description
1	Water use regulation	• The DWS has largely removed the backlog of licence applications that has been delaying legal water use over a number of years. • The DWS has registered all raw water users in South Africa, even though there are challenges in ensuring the accuracy of this data. • Verification of existing lawful uses is in progress across the country. • A number of illegal water users and polluters have been criminally prosecuted.
2	Drinking water quality and wastewater discharge regulation	• Norms and standards for water services have been Gazetted. • The Green Drop and Blue Drop programmes, which include water and wastewater quality

		monitoring, reporting and compliance certification, have substantially improved the quality of drinking water and the quality of municipal wastewater discharges. • The Regulatory Performance Management System, initiated in the 2007/08 financial year, monitors the performance of water service authorities against the key performance indicators provided in the Strategic Framework for Water Services.
3	Infrastructure regulation	Large water infrastructure is regulated under DEA requirements.

4.2 Shortcomings

Table 3: Summary of some shortcomings in the regulatory setup and performance

Regulatory function or activity	DWS performance	Comments
Too many diverse functions are vested in one national department- e.g. DWS is policymaker, owner, operator and regulator of national infrastructure	Lack of focus and objectivity and resultant lack of regulation of in-house entities such as the water trading entity. DWS prefers to act as a shareholder of water boards whilst neglecting to regulate them. Action points for regulation to which the DWS has committed to are unrealistic under the current circumstances.[43]	Concentration of a large number of complex functions in one department. This is difficult to balance as some of these functions are conflicting.
Municipalities are both supported and regulated by DWS	The public interest (regulation) is ignored in favour of political support to municipal management.	A different approach and skills are needed for such diverse functions. The public interest must always remain the most important priority and not short-term political favours
The monitoring of municipalities and water boards to comply	DWS has a regulatory unit but it is understaffed and not sufficiently funded. The acclaimed Blue Drop	The public is entitled to safe drinking water but is currently unaware of the status of drinking

Table 3: Summary of some shortcomings in the regulatory setup and performance		
Regulatory function or activity	**DWS performance**	**Comments**
with national standards such as SANS 241 for drinking water quality.	Program has not released a report since 2014. DWS has informed Parliament in 2018 that the 2015 report was finalized and submitted for approval, with 2016/17 onwards still in progress.[44] A commitment to revitalise the programme implies failures in monitoring.[45]	water supplies - this poses a huge health risk.
Prevention of pollution by controlling discharges from Waste Water Treatment Works (WWTW)	Only an Executive Summary available for Green Drop (GD) 2013 and no details on individual performances of WWTWs.[46] DWS informed Parliament that 2016/17 (Partial) Assessments have been in initiated (in 2018). Green Drop partial assessments are still in progress.[47]	Green Drop program seems to lose track- quality of discharges from WWTWs unknown. The licence conditions controlling discharge conditions are not necessarily valid given the loading of water resources. So whether the effluent complies or not to the current standards, it's not a guarantee to preserve the water reserve. An independent regulator needs to revisit all of these discharge licences without fear or favour.
Regulation of raw and bulk water tariffs	Water Board tariffs are controlled - Raw water tariffs imposed by DWS as water service providers are not regulated at all	Raw water tariffs are unilaterally increased instead of adopting improved efficiency and debt control.
CMAs legislated as catchment-based water regulators	DWS seems reluctant to devolve responsibilities to the functioning CMAs, only two of the nine are reportedly functional according to DWS after more than a decade.	Regional water resource management entities can do more of the DWS centralised functions currently left unattended- such as pollution of rivers.
Follow up actions on non- compliance e.g.	This has been lacking-e.g. the2013 GD report mentions a number of systems that had been issued Purple	Systems in crisis therefore represent a significant slice of all WWTWs regulated. It is doubtful

Table 3: Summary of some shortcomings in the regulatory setup and performance		
Regulatory function or activity	**DWS performance**	**Comments**
those WWTWs with Purple Drops	Drops in 2013. These 248 systems received scores of less than 30% during 2013, thereby earning the undesirable status of "systems in crisis". In the last quarter of 2018, the DWS reported that 46 WWTW failed to meet the minimum standards. This reflects poor enforcement measures on their part as a regulator.[48]	if any action had been taken against any of these municipalities

[1] Definition coined by Mr Helgard Muller, Water Policy and Regulation Specialist.
[2] Thompson H *Water law: A practical approach to resource management &the provision of services* (2015) Juta& Company: Cape Town 7.
[3] See http://www.dwa.gov.za/MinisterSession/Presentations/15%20February%202019%20Institutional%20Rationalisation%20Proposal.pdf.
[4] See http://awsassets.wwf.org.za/downloads/wwf009_waterfactsandfutures_report_web__lowres_.pdf pg 10.
[5] Ibid.
[6] Ibid.
[7] See http://www.dwa.gov.za/about.aspx#vision.
[8] See for example http://pmg-assets.s3-website-eu-west-1.amazonaws.com/180509agsa.pdf; https://pmg.org.za/committee-meeting/26328/.
[9] With the exception of instruments such as the Convention on the Rights of the Child under art 24(2)(c) (vol 3 United Nations Treaty Series pg 3), which South Africa ratified in 1995; the Convention on the Elimination of All Forms of Discrimination against Women under art 14(2)(h) (vol 1249 United Nations Treaty Series pg 1), which South Africa ratified in 1995.
[10] These are instruments such as the African Charter on Human and Peoples Rights (ACHPR) (vol 1520 United Nations Treaty Series pg 217), which South Africa ratified in 1996; the International Covenant on Civil and Political Rights (ICCPR) (vol 999 United Nations Treaty Series pg 171), which South Africa ratified in 1998; and the International Covenant on Economic, Social and Cultural Rights (ICESR) (vol 993 United Nations Treaty Series pg 3), which South Africa ratified in2015.
[11] See arts 4 & 16 ACHPR; art 6 ICCPR and arts 11 & 12 ICESR. Also see Gleick P.H "The human right to water" Water Policy 1 (1998) 490-491.
[12] See https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf.
[13] See http://www.un.org/en/africa/osaa/pdf/au/agenda2063.pdf.
[14] See pgs 22-23.
[15] See pg 2.
[16] See pg 3.
[17] See pg 4.
[18] Section 25(4)(a) RSA Constitution.
[19] Section 25(8) RSA Constitution.
[20] Section 36 RSA Constitution.
[21] Section 27(1)(b) RSA Constitution.
[22] Section 11 RSA Constitution.

[23] Section 10 RSA Constitution. See Gleick P.H "The human right to water" Water Policy 1 (1998) 487-503.
[24] See S v Makwanyane and Another 1995 (6) BCLR 665 par 146.
[25] GN R1352 in *GG* 20606 of 12 November 1999.
[26] GN 704 in *GG* 20119 of 4 June 1999.
[27] Section 1 WSA.
[28] This however does not in clude a water services intermediary, which is "any person who is obliged to provide water services to another in terms of a contract where the obligation to provide water services is incidental to the main object of that contract". Section 1 WSA.
[29] GN R509 in *GG* 22355 of 8 June 2001.
[30] GN R980 in *GG* 23636 of 19 July 2002.
[31] GN 982 in *GG* 41100 of 8 September 2017.
[32] See http://www.dac.gov.za/sites/default/files/NDP%202030%20-%20Our%20future%20-%20make%20it%20work_0.pdf
[33] See pg 411 NDP.
[34] See pg 162 NDP.
[35] Ibid.
[36] Ibid.
[37] Ibid.
[38] See http://www.dwa.gov.za/documents/Other/Strategic%20Plan/NWRS2-Final-email-version.pdf.
[39] See pg iii.
[40] Ibid.
[41] See pg 70.
[42] Delivered 22 May 2018. See http://www.dwa.gov.za/Communications/MinisterSpeeches/2018/Speech%20-%20Budget%20Vote.pdf.
[43] See http://www.dwa.gov.za/National%20Water%20and%20Sanitation%20Master%20Plan/Documents/NWSMP%20Call%20to%20Action%20v10.1.pdf.
[44] See presentation titled "Briefing to the Portfolio Committee on Water and Sanitation on Blue and Green Drop Reports" (24 October 2018) available at https://pmg.org.za/committee-meeting/27319/.
[45] See http://www.dwa.gov.za/National%20Water%20and%20Sanitation%20Master%20Plan/Documents/NWSMP%20Call%20to%20Action%20v10.1.pdf.
[46] See http://www.dwa.gov.za/Documents/Executive%20Summary%20for%20the%202013%20Green%20Drop%20Report.pdf.
[47] Ibid.
[48] See Written Reply to question 3753 in the National Assembly (30 November 2018).