

REVISED STRATEGIC PLAN

(VOTE 36)

FOR THE FISCAL YEARS

2015/16 TO 2019/20

Published by the Department of Water and Sanitation
Private Bag X313
Pretoria
0001
South Africa

Tel: +2712 336 7500
Fax: +2712 336 8664

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Foreword by the Minister

The revised Strategic Plan of the Department of Water and Sanitation encapsulates the planning trajectory of the department towards the realisation of the objectives of the National Development Plan, Vision 2030. They do so by aligning the strategic framework to the 2014 – 2019 MTSF and the performance delivery agreement that I have signed with the Honourable President, Mr Jacob Zuma. In this context, I am therefore highly committed to ensuring our work contributes to the radical-socio economic transformation agenda of the 5th administration of government.

It is instructive to note that the 2014-2019 MTSF has been adopted as the comprehensive five-year implementation plan for the National Development Plan (NDP) 2030 and serve as the principal guide to planning, outlining the strategic focus and direction of government.

The NDP is an overarching plan and a vision to realise the ideals of the Freedom Charter, whose 60th anniversary the nation celebrated in 2015 – the very year declared by the President as the year of the Freedom Charter and Unity in Action. The Freedom Charter has, for many years, served as a beacon of hope towards the ideal of a free, democratic, non-racial and non-sexist South Africa.

Indeed, it is widely acknowledged that elements of the Freedom Charter were fundamental to the drafting of the South African Constitution, the supreme law of the country and the foremost informant of the mandate of the National Government Department of Water and Sanitation.

The existence of the Department of Water and Sanitation is intricately woven into the fabric of the South African society. The Constitution of the country enjoins the department to, in the simplest terms, ensure security of water supply for the total socio-economic development of the country, whilst also ensuring availability of and access to dignified sanitation for all.

As the minister of the fledgling department of Water and Sanitation, I am acutely aware of the formidable challenges towards the achievement of the vision of “equitable and sustainable water and sanitation that supports socio-economic growth and development for the well-being of current and future generations”

However, I am convinced that together with the rest of the team in the Department, led by the Director General, Margaret-Ann Diedricks, we will spare neither effort nor strength in ensuring that we effectively transform the water and sanitation sector as well as provide quality water and decent sanitation to our people.

The period of the strategic plan falls within two great events in 2016; that of the 40-year anniversary of the student uprisings in Soweto, and the 60th anniversary of the historic women’s march to the union buildings in August 1956. And these events come at a time when South Africa is experiencing the strongest El Nino on record and water and food production being under threat.

What is required of us is to seek innovative means and to incorporate smart technologies as we focus on the present while planning for the future. This becomes ever more important in light of South Africa adopting the outcomes of COP21 and the Sustainability Development Goals.

As we continue to consolidate the gains made in the last twenty years of our democratic dispensation and ensuring that South Africa becomes a better place live, we would be the first people to acknowledge that hard work is still required to address the triple challenge of poverty, unemployment and inequality. Clearly, investing in the youth and mainstreaming women in all the work and outputs of the water and sanitation sector becomes a vital component of this strategic plan.

Importantly also, as a cross-cutting sector we have an important role to play in ensuring the success of the drivers and enablers of the nine-point intervention plan announced by the President at his SONA 2015.

Presently, my main focus is the need to ensure that the department achieves its strategic goals as collectively agreed upon with the department’s administrative leadership. In the same breath, we will continue to work with and be guided by the

Portfolio Committee and Select Committee responsible for oversight over our work. This oversight and attention is necessary for our focus on the broader necessities and requirements of the electorate.

Together with our water and sanitation sector entities who remain a critical backbone as repositories of further skills and capacity we will continue to enhance the development of new skills with particular emphasis on the previously disadvantaged, in all careers spanning the sector value chain.

Our cooperation with our sister departments and all spheres of government must assist us to collectively bring services to our people and more importantly in a coordinated fashion. We are an integral part of government and must work together with other role-players and stakeholders for the common good.

The DWS will play a leading role in creating the environment for the achievement of the goals stated in this Strategic Plan. However, the department cannot address this challenge alone. Thus, we are determined to build strong partnerships with stakeholders, citizens and social partners as well as the private sector.

We want our stakeholders to vigorously hold us to account. Above all, we invite them to actively participate in the implementation of this Strategic and Annual Performance Plans. Governance is a two-way street: the government must deliver; but the people must be active citizens in the delivery.

I recommend this revised Strategic Plan for 2015/16 to 2019/20 to Parliament, and also to the people of South Africa.



Mrs N P Mokonyane
MINISTER OF WATER AND SANITATION

Message from the Deputy Minister

The programme of change and transformation in the Department of Water and Sanitation continues with new approaches introduced and new role players identified in conducting our business.

The existing Water Boards are to be aligned in relation to the various provinces and will now be at the centre of the work we do in the local municipalities. The Department will work towards clear segregation of duties between the Water Boards, the District Municipalities and the Local municipalities.

In the last financial year the Department worked very closely with individual municipalities in the various provinces. The District Municipalities have since been charged with a responsibility to coordinate water and sanitation services backlogs in their area of operation.

Presently, in the Eastern Cape we have managed to source information on the water and sanitation services backlogs in Joe Gqabi, Amathole and Chris Hani District Municipalities. In this financial year we will engage all District Municipalities in the country to collect this data and avail to the Department these water and sanitation services backlogs.

This will be done through interactions in meetings with individual district municipalities. This will be coupled with provincial water and sanitation conferences. These conferences will be a platform to continuously share the vision of the Department and mobilise districts to work together with local municipalities in their jurisdiction.

Together with the Water Research Commission, the Department will allow new partners in the water and sanitation space to showcase and present new technology in the market that could assist in alleviating water and sanitation challenges.

Our work in the management of the water resource will continue through youth and women targeted projects. The 2016 National Youth Water and Sanitation Summit will now be positioned better to attract more youth and student formations.

This year's Summit will include more schools, out of school youth formations and many young professionals coming from both the private and the public sector. The information that will be shared in the Summit will be based on the experiences and knowledge acquisition on topical water and sanitation sector issues in the various provinces.

The 2020 Vision for Water and Sanitation Programme aimed at educating schools about water conservation and promotion of water sector careers will be enhanced. Provinces will be required to demonstrate their footprint of this project in each local municipality.

The War on Leaks Programme aimed at eradicating water leaks whilst creating jobs for the youth will in this financial year take in additional 7000 trainees into the system. The 3000 trainees who were part of the 2015 intake will be placed in training institutions closer to their homes and in service training be arranged with their local municipalities.

The Adopt a River Project aimed at addressing pollution in the rivers whilst empowering women through job creation and skills development will be sourced with resources such as personnel that will oversee the project implementation and with funding for provisioning of the project.

The Departmental Unit working on the transformation of women will be assisted to achieve these targets through engagements and joint planning sessions.



In 2016 all our efforts will be directed at mitigating the severe drought conditions that have been experienced recently. The Department will ensure that the challenges of water and sanitation are tackled by all caring and freedom loving South Africans going forward.

Mrs P Tshwete (MP)
DEPUTY MINISTER
WATER AND SANITATION





Overview of the Accounting Officer

Taking up the administrative leadership of the newly formed Department of Water and Sanitation has landed a new challenge in what I call my life as a career public servant.

The nature of the department and the mandate thereof as derived from the country's Constitution, together with the political direction of two very well respected and "steeped in community service" leaders embodied in the Minister and Deputy Minister, leads me to believe that all of us have to roll up our sleeves and keep in step and in line with our political leaders.

The communities we serve are varied and therefore the team and I must ensure that the plans and delivery timelines must release the communities from the frustrations of the society we come from. Our freedom and that of the people we serve cannot be complete until and unless, as a team, we realise and understand that what we are about is the comfort of the communities, wherever they may be.

The service delivery tools in our hands, from the Constitution, to the National Water Act, Water Services Act, Water Research Act, including all the relevant policy mandates and strategies, form a solid basis upon which to build our plans for the next financial years.

My mandate revolves around ensuring that the Department of Water and Sanitation carries out its mandate to the latter. The political guidance and direction impacted by government's Programme of Action will drive all our efforts to respond to and carry out people's needs.

Whilst the delivery of basic services must happen quickly, we must also strictly adhere to all governance processes and requirements.

With the department's budget, it is our responsibility to ensure that all expenditure is utilised for the good of especially the underprivileged.

All the major water infrastructure projects currently underway must be steered towards completion in the allocated timeframes. Proper and timely support to local government must happen within the allowed parameters whilst being conscious of the need to address the communities' patience and right to services.

The delivery of sanitation services, with a particular emphasis on the eradication of the undignified bucket system has never been more critical.

All of us have a duty to the people of South Africa. We have to stand together, give all the technical support to our principals, and most importantly, have pride in what I believe we can all achieve together.

The departments planning process for the 2016/17 medium term has been intensive by also including representatives the department's public entities. This process critically reviewed and recommended changes to the strategic framework of the Department and indeed the broader water and sanitation.

Informing this process was the need to strengthen the situational analysis and performance environment. Most importantly was the need to respond to emerging policy in the form of the NWRS-2, National Sanitation Policy and to strengthen alignment to the MTSF as per the Minister's Performance Agreement.

For improved policy alignment and an attempt of positioning the strategic plan as a sectoral plan, the document has been updated. The intention is for the department's entities and other relevant government departments to align with it when developing their own strategic frameworks and plans.

The plan seeks to better assert the role of the department as a sector leader, responsible for driving policy and setting the strategic direction for the water and sanitation sector.





In line with the NDP, Vision 2030 and the MTSF 2014-19, and in support of the radical socio-economic transformation agenda of the government of the day, this plan then sets out our transformative ambitions for the water and sanitation sector, and the mechanisms through which we will guide and support its development – as a joined up, participatory and collaborative water and sanitation sector.

Ms M Diedricks
DIRECTOR-GENERAL





Official sign off

This strategic plan was developed by the sectoral management of the Department of Water and Sanitation under the guidance of the Executive Authority.

It takes into relevant policies, legislation and other mandates for which the Department is responsible and accurately reflects the strategic outcome oriented goals and objectives which it will endeavour to achieve over the five (5) year period from 2015/17 to 2019/20.

Mr S Mkhize Chief Financial Officer: Main Account	
Mr M Mofokeng Chief Financial Officer: Water Trading	
Ms M Diedricks Director-General	
Mrs P Tshwete Deputy Minister: Water and Sanitation	
Mrs N P Mokonyane Minister: Water and Sanitation	





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List of abbreviations and acronyms

Abbreviation/Acronym	Description
ACIP	Accelerated Community Infrastructure Programme
AMD	Acid Mine Drainage
AMP	Asset Management Plan
APP	Approved Professional Person
BBBEE	Broad-Based Black Economic Empowerment
BDS	Bulk Distribution System
BEE	Black Economic Empowerment
BWS	Bulk Water Supply
CE	Chief Executive
CHDM	Chris Hani District Municipality
CMA	Catchment Management Agency
DIRCO	Department of International Relations and Cooperation
DM	District Municipality
DPME	Department of Planning Monitoring and Evaluation
DPSA	Department of Public Service and Administration
DWS	Department of Water and Sanitation
EC	Eastern Cape
ECL	Environmental Critical Level
EIA	Environmental Impact Assessment
ELU	Existing Lawful Use
EME	Exempted Micro Enterprise
FBSan	Free Basic Sanitation
FOSAD	Forum for South Africa Directors-General
FS	Free State
GA	General Authorisation
GCIS	Government Communication and Information System
GLeWAP	Greater Letaba Water Augmentation Project
GP	Gauteng
GWS	Government Water Scheme
IRS	Implementation Readiness Study
KSD	King Sabata Dalindyebo
KZN	KwaZulu-Natal
LM	Local Municipality
LP	Limpopo
m ²	Metre squared
m ³	Cubic metre
MIIF	Municipal Infrastructure Investment Framework
MI	Megalitre
MI/d	Megalitre per day
MMS	Middle Management Service
MP	Mpumalanga
MPAT	Management Performance Assessment Tool
MTSF	Medium-Term Strategic Framework
MWIP	Municipal Water Infrastructure Programme
NAMP	National Asset Management Plan
NC	Northern Cape

Abbreviation/Acronym	Description
NDP	National Development Plan
NEDLAC	National Economic Development and Labour Council
NT	National Treasury
NW	North West
NWA	National Water Act
NWRI	National Water Resources Infrastructure
NWRS-2	Second National Water Resources Strategy
NWSMP	National Water and Sanitation Master Plan
NWSRS	National Water and Sanitation Resources Strategy
OFO	Organising Framework for Occupation
ORWRDP	Olifants River Water Resource Development Project
OSD	Occupation Specific Dispensation
QSE	Qualifying Small Enterprise
RBIG	Regional Bulk Infrastructure Grant
RDP	Reconstruction and Development Programme
RID	Record of Implementation Decision
RW	Rand Water
RWS	Regional Water Scheme
SADC	Southern African Development Community
SALGA	South African Local Government Association
SDG	Sustainable Development Goal
SIP	Strategic Infrastructure Project
SMART	Specific Measurable Achievable Realistic Time-bound
SMS	Senior Management Service
StatsSA	Statistics South Africa
SWPN	Strategic Water Partners Network
TCTA	Trans Caledon Tunnel Authority
TRA	Temporary Relocation Areas
VIP	Ventilated Improved Pit
WB	Water Board
WC	Western Cape
WCDM	Water Conservation Demand Management
WMI	Water Management Institution
WRC	Water Research Commission
WS	Water Scheme
WSA	Water Service Authority
WSDP	Water Sector Development Plan
WSS	Water Supply Scheme
WTE	Water Trading Entity
WTP	Water Treatment Plant
WTW	Water Treatment Work
WULA	Water Use License Application
WULATS	Water Use License Application Tracking System
WWTP	Wastewater Treatment Plant
WWTW	Wastewater Treatment Work



Part A

Strategic overview

1 Introduction

In 2012, government adopted the National Development Plan: Vision for 2030 (NDP) which is visionary and collaborative blueprint with business and society. It identifies key elements that government should focus on in eliminating poverty and reducing inequality by 2030.

After the 2014 general elections government had a clear picture of what was achieved over the past 20 years towards addressing poverty, inequality and unemployment. Despite these achievements, many challenges still remain resulting in the pronouncement for a radical economic transformation in the ruling party's election 2014 manifesto.

Also during 2014, the sanitation portfolio was transferred to the then Department of Water Affairs resulting in the creation of the Department of Water and Sanitation (hereinafter DWS). The performance agreement of the Minister of Water and Sanitation therefore outlines the specific actions to be pursued by the DWS in collaboration with the sector. These actions set the foundation and high-level tone of this strategic plan.

It is within this context that the five (5) year strategic plan has been formulated to provide strategic direction in meeting the objectives of the mandate. It has thus adopted a sectoral approach and although lead by the DWS, the intent is to provide an adequately broad strategic framework from which all sectoral role-players may find expression, guidance and alignment response.

2 Vision

The vision of the DWS is premised on the NDP, the second National Water Resource Strategy (NWRS-2) and the national water and sanitation policies and strategies. Therefore the DWS vision is as follows:

Equitable and sustainable water and sanitation that support socio-economic growth and development of the well-being of current and future generations.

In defining the above vision statement, the focus is on the following three principles:

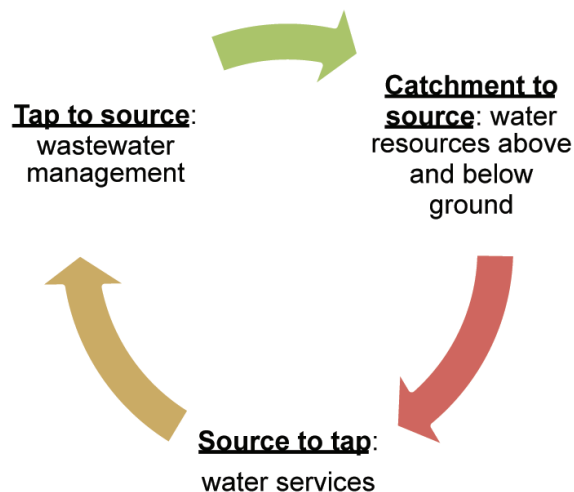


Figure 1: Water and sanitation sector principles

3 Mission

In working towards the achievement of its vision, the mission (aim) of the DWS is as follows:

To ensure the universal access of all South Africans to equitable water resources and sustainable water and sanitation services, by:

- Protecting, developing, conserving, managing and regulating water resources;
- Managing, regulating and providing efficient and effective water and sanitation services;
- Providing strategic leadership and evidence based policy direction to a coordinated water and sanitation sector for improved sector performance and service delivery;
- Building the skills and capabilities of the sector and enhancing information management to inform decision making; and
- Enhancing communication and stakeholder partnerships with communities and sector constituencies to advance the national development agenda.

4 Values

The principles underpinning the achievement of the DWS vision and the implementation of its mission are premised on the *Batho Pele* principles and are aligned to section 195 of the Constitution as follows:

Table 1: Water and sanitation sector values

Value	What it means for the DWS and the sector
Promoting and maintaining high standards of professional ethics	<ul style="list-style-type: none"> • We understand that our stakeholders value and seek openness, honesty, consistency and fairness from us. To achieve these ideals, we have adopted a mind-set of doing what is right and acting in good faith at all times, and especially when nobody is watching • We are committed to ethical behaviour and have a zero tolerance stance towards corruption of any form in the sector • We exercise care not to disclose confidential information
Utilising resources efficiently and effectively	<ul style="list-style-type: none"> • We seek to ensure value for money in all we do • We seek to provide high quality services; cost effectively and with the least possible wastage • Understanding the constraints of government, particularly the scarce resources to pursue all programmes to the full; we seek to proactively focus on turning ideas into cutting edge, best in class and “outside the box” approaches and solutions
Providing services impartially, fairly, equitably and without bias	<ul style="list-style-type: none"> • We strive to actively pursue opportunities to uplift the communities of South Africa, both socially and economically, by challenging the status quo and implementing our mandate with passion and dedication, whilst remaining true to the values of loyal service to the people • We seek to identify quickly and accurately when services are falling below the promised standard and to have procedures in place to remedy the situation • We seek to deliver public services to the many South Africans who do not have access to them and to rectify inequalities in the distribution of existing services • We will use actively identify and use benchmarks to constantly measure the extent to which citizens are satisfied with the service or products they receive from us



Value	What it means for the DWS and the sector
Responding to people's needs; citizens are encouraged to participate in policy-making	<p>We seek to listen to and comprehend the needs of our stakeholders in the sector as the foundation off of which to proactively innovate, through the creation of new approaches to what we do and best fit products and services</p> <p>We actively encourage the public and citizens to participate in policy making and service delivery enhancement</p>
Rendering an accountable, transparent, and development-oriented public administration	<p>We commit to keeping our promises, reporting accurately on our performance and commitments, and taking ownership of the task to ensure that it is done correctly the first time around</p> <p>Transparency will be fostered by providing the public with timely, accessible and accurate information</p> <p>We strive to work with care, empathy, respect and consideration for the wellbeing of our staff, customers and stakeholders</p> <p>Good human resource management and career development practices, to maximise human potential, will be cultivated</p> <p>Employment and personnel management practices based on ability, objectivity, fairness, and the need to redress the imbalances of the past to achieve broad representation will be cultivated</p>

5 Legislative and other mandates

The legislative mandate of the water and sanitation sector seeks to ensure that the country's water resources are protected, used, developed, conserved, managed and controlled through regulating and supporting the delivery of effective water supply and sanitation.

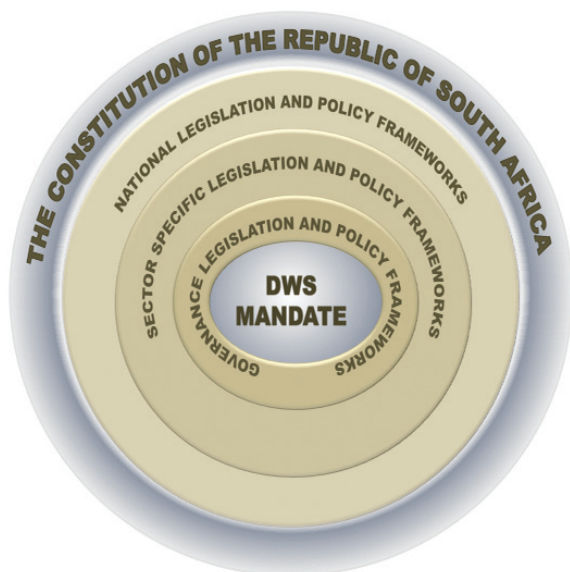


Figure 2: Legislative, policy and strategy context

The above figure broadly illustrates the legislative, policy, and strategy context of the DWS with the specifics detailed below.



5.1 The Constitutional mandate

The Constitution sets out water resources management as a national competency. It also states that everyone has a right to an environment that is not harmful to their health or well-being and supports socially justifiable economic development.

It indicates the rights of individuals to have access to basic water and sanitation and sets out the institutional framework for the provision of these services. It gives municipalities the executive authority and the right to administer the provision of water services within their areas of jurisdiction.

It also gives national and provincial government authority to regulate local government in terms of water and sanitation services. It further gives them the obligation to support and strengthen the capacity of local government to provide services.

It further implies the need for an intergovernmental and participatory approach to managing water resources and water and sanitation services. This includes the clarification of the roles and functions, powers and authority of the different spheres of government and the institutions in delivering on this constitutional mandate.

5.2 The legislative mandates

The Department and the sector draw their primary mandate from the following legislation

5.2.1 The National Water Act, 1998 (Act No 36 of 1998) as amended

The National Water Act seeks to ensure that the country's water resources are protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner for the benefit of all people.

The Act assigns the national government as the public trustee of the water resources. Acting through the Minister, it has the power to regulate the allocation, use, flow and control of all water in the Republic.

It also identifies the need to establish suitable institutions in order to achieve its purpose. In addition, it provides for the development of a regularly reviewed NWRS and the requirement of each Catchment Management Agency (CMA) to develop a catchment management strategy for the water resources within its jurisdiction.

5.2.2 The Water Services Act, 1997 (Act No 108 of 1997)

The Water Services Act prescribes the legislative duty of municipalities as water service authorities to supply water and sanitation according to national norms and standards. In addition, it regulates Water Boards as important water service providers.

The Act compels the Minister to maintain a National Water Services Information System and to monitor the performance of all water services institutions, as well as providing for the monitoring of water services and intervention by the Minister or the relevant Province when necessitated.

With reference to a "right to basic sanitation", this is the primary legislation relating to sanitation in South Africa. It further defines basic sanitation as: *'The prescribed minimum standard of services necessary for the safe, hygienic and adequate collection, removal, disposal or purification of human excreta, domestic waste water and sewerage from households, including informal households'*. Further regulations, norms and standards pertaining to sanitation can be found in the Housing Act (No. 107 of 1997).

It acknowledges that although municipalities have authority to administer water supply services and sanitation services, all government spheres are required to work towards this object, within the limits of physical and financial feasibility.

5.2.3 The Water Research Act, 1971 (Act No 34 of 1971)

The Water Research Act establishes the Water Research Commission and the Water Research Fund, and thus promotes water related research and the use of water for agricultural purposes, industrial purposes or urban purposes. The Minister appoints members of the Water Research Commission (the Commission), and thus exercises executive oversight over the Commission.

5.2.4 Additional service delivery legislation informing the water and sanitation sector

Other legislation applicable to the service delivery orientation of the sector include:

- 1) Intergovernmental Relations Framework Act, 2005 (Act No. 13 of 2005);
- 2) National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended by the National Environmental Management Amendment Act (No. 62 of 2008);
- 3) National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), as amended by the National Environmental Management: Waste Amendment Act, 2014 (Act No. 26 of 2014);
- 4) Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983);
- 5) Infrastructure Development Act, 2014 (Act No. 23 of 2014);
- 6) Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013);
- 7) Restitution of Land Rights Act, 1994 (Act No. 22 of 1994), as amended by the Restitution of Land Rights Amendment Act, 2014 (Act No. 15 of 2014);
- 8) Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), as amended by the Mineral and Petroleum Resources Development Amendment Act 2008, (Act No. 49 of 2008);
- 9) Division of Revenue Act (as amended annually);
- 10) Criminal Procedures Act 1977 (Act No. 51 of 1977), as amended

5.2.5 Governance and control legislation

Other governance and control legislation applicable to the sector include:

- 1) Public Service Act (No. 103 of 1994), as amended, and Public Service Regulations (2001),
- 2) Public Finance Management Act (No. 1 of 1999), as amended, and Treasury and DPME Regulations and Policy Frameworks as published;
- 3) Public Audit Act (No. 25 of 2004);
- 4) Appropriation Act (as amended annually);
- 5) Money Bills Amendment Procedure and Related Matters Act (No. 9 of 2009);
- 6) Municipal Systems Act (No. 32 of 2000);
- 7) Municipal Finance Management Act (No. 56 of 2003).
- 8) Promotion of Administrative Justice Act (No. 3 of 2000);
- 9) Promotion of Access to Information Act (No. 2 of 2000);
- 10) Promotion of Equality and Prevention of Unfair discrimination Act (No. 4 of 2000);
- 11) Skills Development Act (No. 97 of 1998);
- 12) Skills Development Levies Amendment Act (No. 24 of 2010);
- 13) South African Qualifications Authority Act (No. 58 of 1995);
- 14) Protected Disclosures Act (No. 26 of 2000);
- 15) Protection of Personal Information Act (No. 4 of 2013);
- 16) Prevention and Combating of Corrupt Activities Act (No. 12 of 2004);
- 17) Consumer Protection Act (No. 68 of 2008);
- 18) Labour Relations Act (No. 66 of 1995), as amended;
- 19) Basic Conditions of Employment Act (No. 75 of 1997);
- 20) Employment Equity Act (No. 55 of 1998), as amended;
- 21) Occupational Health and Safety Act (No. 85 of 1993);
- 22) Compensation for Occupational Injuries and Diseases Act (No. 130 of 1993);
- 23) Broad-Based Black Economic Empowerment Act (No. 53 of 2003), as amended;
- 24) Preferential Procurement Policy Framework Act (No. 5 of 2000);
- 25) Use of Official Languages Act (No. 12 of 2012);
- 26) All Municipal by-laws and local legislation pertaining to the DWS and its operations.

Although the above-mentioned legislation is not exhaustive, it is recognised that the DWS must comply with all national and provincial legislation, regulations, and policy directives, as well as local by-laws applicable to their functions.

5.3 Policy mandates

The Constitution and applicable legislation defines the objects and mandates of the DWS and sector and regulate how it operates, various Policy and Strategy Frameworks inform “how” the mandates should be implemented and the priorities that should be given focus.

5.3.1 The National Development Plan - Vision 2030

This is government’s long term plan that determines what the country should look like by 2030. It highlights the two strategic goals of eliminating poverty and sharply reducing inequality with associated objectives to ensure their achievement. The relevant priority areas for the DWS over the long term can be summarised as follows:

An economy that will create more jobs

As the country needs a more inclusive economy in which “the fruits of growth are share more equitably”, the NDP proposes the creation of 11 million jobs by 2030 by realising an environment for sustainable employment and inclusive economic growth; promoting employment in labour-absorbing industries; raising exports and competitiveness; strengthening government’s capacity to give leadership to economic development; mobilising all sectors of society around a national vision.

Improving infrastructure

As the country’s investment spending decreased from 30% (in the 1980s) to 16% (in the 2000s) of the gross domestic product (GDP), the NDP proposes gross fixed capital formation to reach 30% of the GDP by 2030 to see a sustained impact on growth and household services. In view of this, the NDP proposes prioritising a number of investments including the upgrading of formal settlements; public transport infrastructure and systems; the development of Durban – Gauteng freight corridor; the construction of a new coal line to unlock coal deposits in the Waterberg; the timely development of a number of key new water schemes to supply urban and industrial centres; the establishment of a national water conservation programme; procuring about 20 000MW of renewable energy. In addition it identifies, key issues to improve the management, use and conservation of South Africa’s water resources and the provision of water and sanitation services which include reviewing the pricing model to fund investments to support economic uses of water, considering the possible establishment of an independent economic regulator, finalising the institutional arrangements.

Transition to low a carbon economy

As water becomes scarcer and global policy aims to price in the cost of carbon emission, the country needs to move away from the unsustainable use of coal or so-called “dirty energy” (natural resources). The NDP proposes that this transition should include support for a carbon budgeting approach; introducing an economy-wide price for carbon; a target of 5 million solar water heaters by 2030; building standards that promote energy efficiency; simplifying the regulation regime to encourage renewable energy.

Inclusive and integrated rural economy

The economic and social legacy of colonialism and apartheid resulted in rural areas that are characterised by unusually high levels of poverty and joblessness with very limited employment in agriculture. The NDP proposes that by 2030, the rural communities should have greater opportunities to participate fully in the economic, social and political life of the country. To achieve an inclusive rural economy, the NDP proposes a multi-pronged approach that entails creating a million jobs through agricultural development (based on effective land reform and the growth of irrigated agriculture and land production); basic services should exist to enable people to develop the capabilities they need to take advantage of economic opportunities (e.g. ensuring food security and farm workers’ empowerment); industries such as agro-processing, tourism, fisheries and small enterprises should be developed where potential exists.

Reforming the public service

A capable state is a crucial prerequisite for the country's development. Since the market cannot resolve all of the country's challenges, direct interventions by an effective government are required to guarantee the safety and security of its citizens. The NDP proposes radical reforms in several areas including enhancing Parliament's oversight role, stabilising the political/administrative interface, professionalising the public service, upgrading skills and improving coordination. The NDP proposal on professionalising the public service is for heads of departments to report to a head of civil service on administrative matters; introducing a hybrid system (i.e. incorporating both the political and administrative elements) of appointing heads of department; introducing a graduate recruitment programme and a local government skills development strategy to attract high calibre candidates; give the Public Service Commission the power to develop and monitor appointments norms and standards at each level; adopt a purely administrative approach for lower-level appointments with senior officials given full authority to appoint staff in their departments.

5.3.2 The 2014-2019 Medium Term Strategic Framework

This is a government five-year strategic plan (i.e. within a given electoral term) that reflects commitments made by the governing party's election manifesto and commitments to implement the NDP. It has 14 priority outcomes and the following are relevant to the DWS:

Outcome 4: Decent employment through inclusive growth

The actions contained in the detailed outcome document seek to achieve the NDP vision of addressing unnecessary blockages to investment; providing opportunities for the unemployed, especially young people, to contribute to the economy; ensuring greater income equality by addressing the position of the working poor; supporting more equitable workplaces; and increasing investment in new sources of economic growth and employment.

The DWS supports the following actions; ensuring:

- Productive investment is effectively crowded in through the infrastructure build programme;
- The productive sectors account for a growing share of production and employment to support inclusive and employment-creating growth;
- The elimination of unnecessary regulatory burdens and lower price increases for key inputs and wage goods to foster investment and economic growth;
- The improvement of workers' education and skills to meet economic needs; and
- The growth of public employment schemes to provide short-term relief for the unemployed and build community solidarity and agency.

Outcome 6: An efficient, competitive and responsive economic infrastructure network

The actions contained in the detailed outcome document seek to achieve the NDP 2030 of an investment in a strong network of economic infrastructure designed to support the country's medium and long-term economic and social objectives. This economic infrastructure is a precondition for providing basic services such as electricity, water, sanitation, telecommunications and public transport, and it needs to be robust and extensive enough to meet industrial, commercial and household needs.

The DWS supports and leads the following actions:

- Improve regulation, funding and investment (i.e. Consider establishing an economic regulator for water, independent from the department)
- Ensure reliable generation, transmission and distribution of energy, including electricity, liquid fuels, coal, and gas (i.e. Mokolo Crocodile Water Augmentation Project (MCWAP) Phase 1, ready for operations by March 2015, MCWAP 2A)
- Ensure the maintenance and supply availability of our bulk water resources infrastructure, including dams and inter-basin transfers, bulk water reticulation and wastewater systems (i.e. A 5% increase in bulk water resources commissioned inclusive of the following projects Olifants River Water Resources Development Project (ORWRDP), Mzimvubu Water Project, Clanwilliam Dam Project, Lesotho Highlands Phase 2)

Outcome 7: Vibrant, equitable, sustainable rural communities contributing towards food security for all

The actions contained in the detailed outcome document seek to achieve the NDP 2030 vision of rural areas which are spatially, socially and economically well integrated - across municipal, district and provincial and regional boundaries - where there is economic growth, food security and jobs as a result of agrarian transformation and infrastructure development programmes with improved access to basic services, health care and quality education. By 2030 agriculture should create close to 1 million new jobs, contributing significantly to reducing overall unemployment.

The DWS supports the following actions

- Increased access to quality basic infrastructure and services in rural areas
- Smallholder farmer development and support (technical, financial and infrastructure) for agrarian transformation
- Increase the percentage ownership of productive land by previously disadvantaged individuals from 11.5% in 2013 to 20% by 2019
- 7.2 million hectares of land transferred to previously disadvantaged individuals which is being used for agriculture (as compared to 4 million hectares in 2013)

Outcome 9: Responsive, accountable, effective and efficient local government

The actions contained in the detailed outcome document seek to achieve the NDP 2030 vision of the proportion of people with access to the electricity grid should rise to at least 90% with non-grid options available for the remainder of households. Given the negative impact that lack of access to water and sanitation has on human dignity, health and the economic prospects of households, the NDP envisages full access to affordable and reliable water and hygienic sanitation before 2030 for all South Africans. In instances where municipalities lack technical capacity, alternative institutional mechanisms (such as regional utilities) should be considered so that such rights are not compromised.

The DWS supports the following actions

- Increase the percentage of households with access to functional water service from 85% in 2013 to 90% by 2019.
- Increase the percentage of households with access to a functional sanitation service from 84% in 2013 to 90% by 2019, including the elimination of bucket sanitation in the formal areas.

Outcome 10: Protect and enhance our environmental assets and natural resources

The actions contained in the detailed outcome document seek to achieve the NDP 2030 vision South Africa's transition to an environmentally sustainable, climate-change resilient, low-carbon economy and just society will be well under way.

The DWS supports and leads the following actions:

- Implementation of climate change responses in five critical sectors
- Increasing the compliance of mines with the National Water Act from 35% in 2013 to 60% in 2019

Outcome 11: Create a better South Africa, a better Africa and a better world

The actions contained in the detailed outcome document seek to achieve the NDP 2030 of a South Africa, informed by its national interests, is a globally competitive economy and an influential and leading member of the international community. South Africa should be a key promoter and contributor to sustainable development, democracy, the rule of law, human rights, and peace and security, within a safe, peaceful and prosperous Southern African Region and Africa as well as a fair and just world.

- Support regional and continental processes to respond to and resolve crises, promote peace and security, strengthen regional integration, significantly increase intra-African trade and champion sustainable development in Africa
- Contribute to the creation and maintenance of peace and stability in the region and on the continent
- Promote sustainable development and continental integration by implementing and contributing to the implementation of NEPAD programmes and plans

- Ensure that most targeted resolutions of institutions of global governance reflect South Africa's positions and that the decisions of these institutions are aligned to Africa's development agenda
- Promote mutually beneficial South-South cooperation by utilising membership of/engagements with formations and groupings of the South to advance SA's foreign policy objectives

Outcome 12: An efficient, effective and development-oriented public service

The actions contained in the detailed outcome document seek to achieve the NDP 2030 of institutionalising long-term planning; forging a disciplined, people-centred and professional public service; empowering citizens to play a greater role in development; and intensifying the fight against corruption

- Taking a more long term approach to developing skills and a professional ethos of public service by turning every workplace into a training space with a particular focus on on-the-job learning where public servants are adequately supported in order to develop the skills they need during the course of their career in the public service
- Addressing weaknesses in procurement, management and operations systems that undermine the efficiency and effectiveness of public expenditure and impact on the quality of service delivery
- Improving the responsiveness of the public service to citizens with a particular focus on strengthening routine day-to-day accountability at the point of delivery and ensuring existing mechanisms for citizen participation are used effectively
- Improving the management of the political-administrative interface and reducing the high turnover in administrative leadership which leads to organisational instability
- Achieving more effective inter-departmental coordination
- Combating corruption more effectively

5.3.3 The second National Water Resource Strategy, 2013

As the NWRS provides the framework for the management of water resources throughout the country, the figure below illustrates the strategic direction for achieving this.



Figure 3: National Water Resource Strategy -2 strategic direction for the management of water resources

In line with the national economic and development priorities, the NWRS-2 provides for a new era of advanced and smarter water management. It therefore identifies five (5) sector priority focus areas for the 2013 to 2018 period as follows:

- Achieving equity including Water Allocation Reform (WAR);
- Water conservation and water demand management (WCWDM);
- Institutional establishment and governance;
- Compliance monitoring and enforcement;
- Planning infrastructure development & operation and maintenance of water resources infrastructure.

Due to its legislated and strategic importance, careful consideration has been given to ensuring that this strategic plan aligns to the strategic framework and related strategic actions of the NWRS-2.

5.4.3 The Sanitation policy

Access to adequate sanitation is fundamental to personal dignity and security, social and psychological well-being, public health, poverty reduction, gender equality, economic development and environmental sustainability. The right to sanitation has been affirmed as internationally through the passing of a resolution by the UN General Assembly in July 2010 declaring *'the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and human rights'*.

The existing policies guiding the provision of sanitation are listed below:

- | | |
|---|---|
| 1) White Paper on Water Supply and Sanitation (1994); | 5) White Paper on Basic Household Sanitation (2001); |
| 2) National Sanitation Policy (1996); | 6) Revision of the 2001 White Paper on Basic Household Sanitation (2011); |
| 3) Regulations Relating to Compulsory National Standards and Measures to Conserve Water (Compulsory National Standards) (2001); | 7) Strategic Framework for Water Services (2003); |
| 4) Norms and Standards in Respect of Tariffs for Water Services (Norms and Standards) (2001); | 8) National Sanitation Strategy (2005); |
| | 9) Free Basic Sanitation Implementation Strategy (2009). |

With the reincorporation of sanitation into the DWS, a process to review the National Sanitation Policy and related strategies is underway.

5.4 Relevant court rulings

There are no relevant court rulings that have a significant ongoing impact on the operations of the Department of Water and Sanitation.

5.5 Planned policy initiatives

The planned policy initiatives under review are as follows:

5.5.1 Development of the Water and Sanitation Policy Framework

The development of the National Water and Sanitation Policy Framework aims to consolidate the various water and sanitation policies into a single, cohesive policy framework to guide the water and sanitation sector. This is to include a clarification of the roles and responsibilities of all role-players across the three spheres of government and the water management institutions to facilitate enhanced cooperation and collaboration in the rollout of bulk water resources, water supply and sanitation services.

5.5.2 Development of the National Water and Sanitation Act

The National Water and Sanitation Act is intended to consolidate the National Water Act and Water Services Act into one piece of legislation. This consolidation will not only obviate the need for cross reading between the two Acts but will also enable the water sector to have a clearer understanding of the legislative framework regarding water management across the entire water and sanitation value chain.

The National Water and Sanitation Act (hereinafter the Act) seeks to empower the Minister to have full oversight and authority over the entire water and sanitation value chain. It also seeks to transform and rationalize the water management institutions. The Act will incorporate aspects relating to sanitation with the aim of enhancing service delivery by using water as a mega nexus. It will introduce an efficient and cost effective dispute resolution mechanism in relation to water use applications or decisions taken by the responsible authority.

A number of activities have been undertaken and completed as per the legislative roadmap approved by the Minister. The first draft (version 1) of the Bill was produced in May 2015. With the received internal inputs, further refinements to the Bill were done and the intention is to present them to the department's management for endorsement. Although the drafting of the Bill is at an advanced stage, its finalisation depends on the outcome the discussions by the department's management and the finalisation of the National Sanitation Policy.

It is envisaged that the Bill would be submitted to Cabinet for approval of public consultations by March 2016. The targeted introduction of the Bill to Parliament is by the end of September 2016.

The department plans to have the National Water and Sanitation Act passed into an Act of Parliament and signed into law by the President during the year 2017/18.

5.5.3 Development of the National Water and Sanitation Resources Strategy

Subsequent to the reconfiguration of the Department to include the sanitation function, the second edition of the NWRS will be reviewed to incorporate the sanitation function. This will allow for the consideration of all legislated processes in the development of a revised National Water and Sanitation Resources strategy. The aim is to table the NWSRSS to Cabinet for approval during the 2017/18 year financial year.

5.5.4 Review of the Water Research Act

The review of the Water Research Act is at an advanced stage and seeks to enhance the mandate and governance of the Water Research Commission. It also seeks to better align the Act with all other applicable legislation informing the orientation of the service delivery for the water and sanitation sector that was not in place at the time this Act was promulgated in 1971.

5.5.5 Review of the water pricing strategy

The Water Pricing Strategy sets out government's approach to raw water pricing. The strategy review seeks to improve the financial viability of government's bulk raw water business to ensure that this scarce resource is valued by all citizens. The major change of the review is to move from the Return on Asset method of infrastructure costing to a method of pricing based on Future Infrastructure Built over 10 years per province.

5.5.6 Development of the funding model

The intention of developing a funding model is to determine the variety of financing mechanisms or models adopted in South Africa and internationally to fund infrastructure. The project will look at the principles of infrastructure funding and financing and help to identify the lessons learnt that could shape future investment decisions in the South African water sector.

Apart from identifying key success factors, the review is also expected to explore innovative and off-budget financing mechanisms, in order to consider their suitability for the South African water and sanitation sector.

6 Situational analysis

A number of matters in the external and internal environment affect the department's ability to deliver on its mandate. Some of these present various challenges and opportunities impacting on its operations influencing planning decisions and the required trade-offs resulting in the prioritisation of certain interventions and programmes over others taking into consideration the required resourcing and associated risks.

6.1 Contextualising water and sanitation

Although water is the most abundant resource on Earth, less than 1% of freshwater is accessible for direct human use. The physically accessible freshwater potential of the world is 90 000 km³, with an estimated 35 million km³ inaccessible as it is either locked in the ice cover of the Arctic or Antarctica or in deep aquifers.

The world's surface water is affected by different levels of precipitation, evaporation and runoff. The GRID-Arendal¹ presents the different rates at which these processes affect major regions of the world, resulting in the uneven distribution of freshwater. It shows the amount of precipitation in cubic kilometers and the percentage of that amount which evaporates or becomes runoff for each region.

The precipitation per annum for:

- North America is 18 300km³, of which the evaporation rate is 55% and the runoff rate is 45%.
- South America is 28 400km³, of which the evaporation rate is 57% and the runoff rate is 43%.
- Europe is 8 290km³, of which the evaporation rate is 65% and the runoff rate is 35%.
- Asia is 32 200km³, of which the evaporation rate is 55% and the runoff rate is 45%.
- Australia and Oceania region is 7 080km³, of which the evaporation rate is 65% and the runoff rate is 35%.
- Africa is 22 300km³, of which the evaporation rate is 80% and the runoff rate is 20%.

Southern Africa only has 12.25% of the total water in Africa making it a highly arid region. Rainfall is however relatively higher in the northern and eastern parts of Southern Africa (viz. DRC, Zambia and Mozambique) with the drier parts of the region including Namibia, Botswana and South Africa.

South Africa has the mean annual rainfall of approximately 500mm as compared to the world's average of 860mm. Therefore, it is characterised by low, variably distributed rainfall as well as high evaporation rates, resulting in the uneven distribution of runoff across the country. The country therefore experiences severe and prolonged hydrological droughts, which may last as long as 10 years at a time. The quality of water in South Africa is also negatively impacted by dissolved salts from host rocks in certain areas, for example, Namaqualand in the Northern Cape.

The surface water potential of the major drainage systems in South Africa are dominated by the Orange and the Limpopo river basins, which are shared with neighbouring countries. Over 60% of the country's river flow comes from 20% of the land area. To overcome the uneven spread of water resources and to manage floods and drought, more than two thirds of the country's mean annual rainfall is currently stored in dams.

The country's water security is mainly reliant on fresh surface water, with ground water and return flows underutilised. However, the freshwater available for utilisation is currently at its limit, and alternative sources such as ground water needs to be further exploited. In addition, the country shares four (4) major rivers with six (6) neighbouring states, namely, Zimbabwe, Botswana, Mozambique, Swaziland, Lesotho and Namibia. Therefore, international agreements on water sharing are in place on all of these river basins.

The Constitution of South Africa provides that everyone has the right to basic water supply and sanitation. However, the *South African Human Rights Commission Report on the Right to Access Sufficient Water and Decent Sanitation in South Africa (2014)*, reported that although great strides had been made over the past 20 years of democracy, approximately 11% of formal and informal households (i.e. 1.4 million) still need sanitation services meeting the prescribed basic standards. In addition, during the 2011 Census 46.3% of households had access to piped water and over 85% had access to water at acceptable RDP level.

South Africa has adopted the United Nation's post-2015 development agenda that identified 17 Sustainability Development Goals (SDGs) to carry the global sustainability development agenda to 2030. These require the water and sanitation sector as a cross cutter to support the achievement of the targets within the 17 SDGs.

¹ Grid-Arendal: UNEP associated centre specialising in the provision of environmental data to researchers and policy makers

This contextual overview sets the tone for the critical review of the performance environment of the DWS and the broader water and sanitation sector, informing this revised Strategic Plan.

6.2 Performance Environment

6.2.1. Supply of water resources

South Africa's challenge into the future is to ensure that there is fair and equitable redistribution of water resources across the various sectors. This should take into account the country's socio-political and economic transformation agenda. As the country has a limited resource base, with competing sectoral interests, trade-offs must be made in prioritising uses, affordability and sustainability.

South Africa is still heavily reliant on surface water and its further development with more than two thirds of the country's mean annual runoff already stored in dams. Where additional water is still available, such as in the uThukela, Mzimvubu and Pongola basins, it is located in areas far from the existing centres of demand. It is thus important for South Africa to focus its water resource planning in the following areas:

- Ground water currently reflects only 9% use and is underutilised, undervalued and not well managed. With about 3,500 million m³/a of groundwater estimated to be available for further development, much scope exists to exploit the potential of ground water as a freshwater source.
- At 14%, water re-use is already a major component of the water mix, albeit mostly indirectly. Direct re-use, especially in the coastal areas must be further encouraged.
- There is also large scope for increasing desalination, which is currently providing less than 1% of the country's water needs. Inland measures are in place to desalinate acid mine water and brackish water resources, whilst coastal areas have an opportunity to desalinate sea water.

From the above, the department is committed to improve integrated water resource management to ensure continued water security. This includes optimising dam storage and transfer systems, effectively managing the water resources mix and exploring various options for the reconciliation of water availability with demand.

The already constrained water resources is further impacted by the current prolonged dry spell coinciding with the drought legacy conditions in a number of provinces. The predictions of climate forecasting models indicates that dry spell effects could last for up to seven years. Therefore, the construction of additional bulk water storage capacity, such as the Lesotho Highlands Phase II project and others, are thus critical to ensuring water security in the long term.

Approximately 9.3% of available potable is water lost through leakage. This is water that the country cannot afford to lose especially within the current prolonged drought. In the short-term the department's mitigation measures include the implementation of the "war on leaks" programme that will train youth to repair leaking taps and pipes in their communities. In addition, an allocation of R350 million has been made to drought related projects in the short term. Infrastructure would also be upgraded, rainwater harvested and water desalination projects would be expedited.

Through various communication campaigns, the consumers within the various sectors within agriculture, domestic, industrial, power and mining would be encouraged to limit their water consumption patterns especially during this drought period.

6.2.2 Reconciling water use and meeting the demand for water resources

Considering the above water supply constraints and that water plays a central role in the growth and development of all major economic sectors, meeting the growing demand for water is crucial for economic growth and job creation and the realisation of the NDP, Vision 2030.

The figure below reflects the current contribution to and water needs of the major economic sectors.

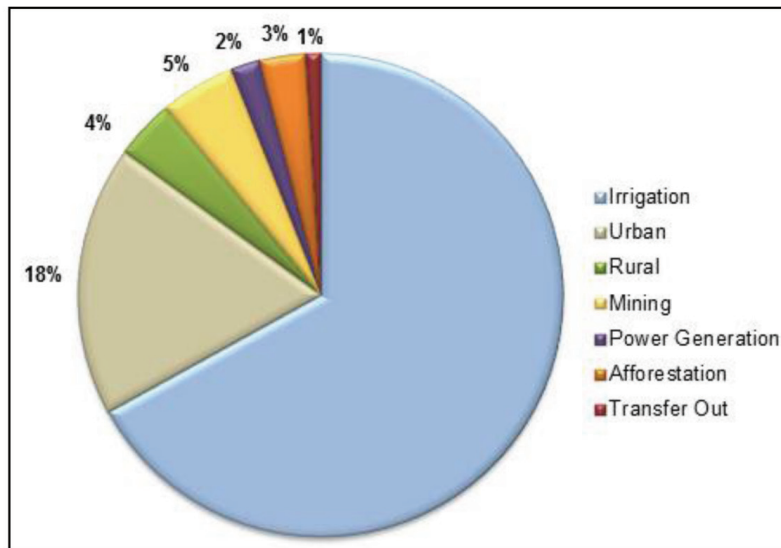


Figure 4 Water use per economic sector

In understanding the above chart, the below table provides a further analysis of each sector and the impact of water on the sector, and therefore on demand planning:

Sector	Characteristics/Policy Imperatives	Water needs and impact
Agriculture <i>(Irrigated agriculture is the largest single user of water in SA (i.e. 60%) and has huge potential socio-economic impact for rural communities)</i>	<ul style="list-style-type: none"> Approximately 8.5 million people are directly or indirectly dependent on agriculture for employment and income Agriculture (consisting commercial and subsistence farmers) contributes approximately 3% to GDP and 7% to employment, with about 1.3 million hectares irrigated The New Growth Path (NGP) has set a target of 300,000 households in small holder schemes and 145,000 jobs to be created in agro-processing by 2020 	Water is the major limiting factor in the growth of the agricultural sector and poor water quality has a negative impact on agricultural exports and related foreign income.
Energy <i>Only uses 2% of water but contributes 15% to SA's GDP</i>	The sector creates jobs for 250,000 people and generates 95% of South Africa's electricity, which is also exported to other African countries	Power generation is a water use of strategic importance.

Sector	Characteristics/Policy Imperatives	Water needs and impact
Mining <i>Uses 5% of water and contributes 8.8% directly and 10% indirectly to SA's GDP</i>	<ul style="list-style-type: none"> ▪ The mining sector creates about 1 million direct and indirect jobs • The sector accounts for a third of the market capitalisation of the JSE and is a major attractor for foreign direct investment (FDI) • The NDP has set a target of 140,000 new jobs for the sector by 2020 	<ul style="list-style-type: none"> ▪ Mining and related activities require significant quantities of water and impact on the environment through pollution, including legacy issues of past pollution such as acid mine drainage - requiring remedial interventions ▪ The development of new mines in water-scarce areas requires planning to arrange for the transfer of water and development of new sources, with attention to waste processing and remediation
Manufacturing	<ul style="list-style-type: none"> ▪ The manufacturing sector contributes approximately 15.5% to GDP and 13.3% to jobs ▪ The NGP has set a target of 350,000 new jobs for the sector by 2020 	Water is required in the manufacturing processes and for cooling
Tourism	<ul style="list-style-type: none"> ▪ The tourism sector contributes approximately 7% to GDP and creates in excess of 500,000 jobs. It is a sector with high job growth potential ▪ The NGP has set a target of 225,000 new jobs for the sector by 2015 	<ul style="list-style-type: none"> ▪ Drinking water quality matching international standards and reliable water supply and sanitation services are crucial to the success of the sector ▪ Many tourism sites require ongoing attention to aquatic ecosystems

Section 6 of the National Water Act (No.36 of 1998), provides for the allocation of water for strategic use. The Act lists two key areas that are to be targeted for this purpose in terms of allocation priorities:

- 1) The transfer of water from one water management area to another; and
- 2) The continued availability of water to be used for electricity generation throughout the country.

The energy sector is highly dependent on reliable supplies of water for the generation of electricity (steam generation and cooling processes). An elaborate and sophisticated network of water transfer and storage schemes have been developed specifically to support this and to ensure high levels of reliability. Conversely, the water sector is highly dependent on a constant and reliable supply of electricity to move or transfer water.

This interdependency is critical in informing water resources planning and the role the sector may play, through the processes of cooperative governance. This water demand and supply scenario illustrates the need to adopt new approaches to reconcile supply and demand, with a focus on the most stressed inland catchments where much of South Africa's economic growth and social development are occurring.

To stimulate economic growth, meeting water demands in rural areas is also crucial, as is meeting the South African Irrigation Strategy which targets an increase of more than 50% of irrigated land in South Africa. Water use efficiency and selected new developments, such as in Mzimvubu are also important to meeting the demands of the agricultural sector.

From a planning perspective it is also important for the sector to clearly understand the developments and needs in the mining, forestry and energy sectors, as well as considering large industrial plants such as the coal-to-liquid fuel plants planned for development by Sasol. Furthermore, in planning, a response is required to understanding the impacts of climate change in terms of areas that will be wetter, areas that will experience more intense and prolonged periods of drought, as well as variable weather patterns leading to sudden high volumes of rainfall and flooding. To support the more effective management of the above challenges, work is currently underway to:

To support the more effective management of the above challenges, work is currently underway to:

- Explore appropriate institutional models for a water and sanitation infrastructure agency.
- Transform water boards into regional water utilities
- Establish 9 Catchment Management Agencies (CMAs) that will manage the 9 Water Management Areas (WMAs) as indicated in slide 9 below.

6.2.3 Infrastructure in terms of water resources and water services

There is a well-developed infrastructure, with more than 4,395 registered dams in South Africa, including 350 dams belonging to the department, and a number of large-scale inter-basin water transfer schemes. Water services infrastructure covers more than 35,000km of bulk pipelines and 200,000km of reticulation systems that are managed by 152 water service authorities and providers.

However, this existing infrastructure needs maintenance and the country is already experiencing challenges with lack of focus on sustainable asset management. The schemes also require efficient and effective operations, for which specialised skills and capabilities at all levels are needed. Major challenges are experienced with regard to the capabilities of water services authorities to effectively manage the schemes on a sustainable basis. This issue needs to be dealt with decisively through a review of the mandates and policies in relation to the management of water infrastructure, and available capacity.

Work is also required in terms of rolling out the establishment of appropriate institutions, such as Regional Water Utilities, as well as to better leverage private sector support. Non-revenue water is also a challenge to be dealt with.

Medium to long term capital investment plans must be based on up-to-date reconciliation of changing water requirements and water availability from surface water, groundwater, re-use, desalination of seawater and rainwater harvesting sources. In this revised strategic plan, a large focus is placed on increasing bulk water supply through effective project planning, project implementation, as well as strengthened demand management planning processes; for optimal budget spend towards meeting targeted completed dates for bulk projects.

6.2.4 Water quality and environmental protection

The main contributors to water quality problems and environmental concerns are mining (acidity and increased metals content), urban development (salinity, nutrients and microbiological), industries (chemicals and toxins) and agriculture (sediment, nutrients, agro-chemicals and salinity through irrigation return flows). Untreated or poorly treated wastewater is severely affecting the quality of water in many areas, as well as negatively impacting on the environment.

Climate change is expected to exacerbate the already substantial pressure on freshwater and estuarine ecosystems by altering rainfall patterns and the more frequent or intense occurrence of events such changes in flow patterns, droughts and storms.

South Africa's water ecosystems are not in a healthy state. Of the 223 river ecosystem types, 60% are threatened, with 25% of these critically endangered. Less than 15% of river ecosystems are located within protected areas, of which many of which are threatened and degraded by upstream human activities. Of 792 wetland ecosystems, 65% have been identified as threatened and 48% as critically endangered.

A further key factor impacting on water quality is the treatment of wastewater; and according to the 2014 Environment Performance Indicator where South Africa rates 56th of 178 countries. Maintenance of these systems is the responsibility of local government and is highly impacted by a lack of resources and requisite skills to manage and maintain the systems to the required standards, resulting in untreated effluent flowing into river systems, with detrimental effects on the eco-systems.

Acid mine drainage (AMD) has also been reported from a number of areas in South Africa, including the Witwatersrand Gold Fields, the Mpumalanga and KwaZulu-Natal Coal Fields and the O'Kiep Copper District.

The DWS must continue to support and lead improvements in water quality and environmental protection across the value chain through a range of interventions, including the assessment of water supply and wastewater treatment systems and the close monitoring of non-compliant systems in terms of the Water Services Act. Dams must be evaluated in terms of dam

safety regulations, and water management institutions must be monitored to ensure they in turn effectively monitor affiliated water users. Non-compliance will continue to be investigated and punitive action taken where applicable and possible.

In addition, the Department must continue to monitor the level of compliance of mines against their water use entitlements. In this regard, the mine water management policy is in the process of being finalised and approved. Once in place, the intention is to implement the environmental levy on mines. In order to mitigate the effects of acid mine drainage, the Department is rolling out its plan to assess all 9 catchment areas for acid mine drainage; and as each assessment is completed the area specific mitigation strategies will be implemented.

6.2.5 Provision of basic services in terms of water and sanitation

As compared to the rest of Africa, South Africa is performing relatively well in the provision of basic water and sanitation services. However, as acknowledged by government and through the National Development Plan, more work is still required to extend this basic service to the entire population.

Data from the 2014 Environmental Performance Index supports the posture that South Africa still has much to do in relation to the provision of water and sanitation. The Index ranks South Africa at 72nd of 178 countries in its overall ranking and 107th in terms of access of the population to drinking water and basic sanitation.

While it is primarily the function of local government to ensure the provision of basic water and sanitation; the DWS supports the activities related to achieving the MTSF targets of 90% access to basic water and sanitation, as well as the eradication of the bucket system by 2019.

The DWS is also committed to supporting COGTA in its “back to basics programme” by providing technical support to local government and intervening directly in priority areas where local government lacks the capacity and capability to provide basic water and sanitation services.

6.2.6 Further environmental factors impacting on the work of the sector

A comprehensive environment analysis was conducted as part of the strategic planning process, detailing the key issues impacting on the work of the Department. The detailed PESTEL is attached to this strategic plan as an annexure with the below reflecting the salient points requiring a response by the Department over the period of the revised strategic plan.

Strengthening the regulatory environment

The impact of change in the environment is not confined to only water issues but extends to socio-political and socio-economic imperatives that warrant a review of the regulatory environment. Of late, this includes the fact that South Africa has adopted the UN's sustainability development goals and committed to the outcomes of COP21. Combined with the policy direction of the country and particularly the policy implementation challenges, a policy shift and review of legislation informing the mandate and service delivery orientation of the Department and the broader water and sanitation sector is necessary.

Currently, the National Water Act and the Water Services Act are the two legal prescripts addressing the water value chain. The time is opportune to review these pieces of legislation and to consolidate them into a single, comprehensive Act for improved responsiveness to the geo-political and regulatory environment. It is envisaged that having a single, consolidated legislative prescript will enable the Minister, the DWS, water management and services institutions, and water users to have a clearer understanding of the legislative aspirations and requirements regarding water across the full water and sanitation value chain; with due consideration for the latest developments in sustainability and water mix diversification. A single Act for the water value chain will also eliminate any confusion associated with having to cross-read between two Acts.

In the water resource management environment, issues have emerged in which policy is not definitive and thus unable to effectively ensure its sustainable management. These could therefore impede effective service delivery and sustainable management of water resources if not addressed through a policy statement; a process the DWS is leading in collaboration with other key departments and stakeholders.

The National Water Act provides for the establishment and transformation of institutions to help the DWS to give effect to its core mandate. There are challenges that have been broadly documented regarding the lack of accountable and efficient management of regional water infrastructure and also problems with the delivery of water services by local government. The process of rationalising institutions and establishing regional water authorities is underway.

Equity is critical in ensuring that water reform in South Africa is realised. In the water sector, equity implies justice in the management of water, responding to social and economic needs of all South Africans. The existing legal framework and policy does not adequately respond to the objective of redress in terms of making water available and advancing equity considerations. It is imperative that provisions within the NWA should not only protect the interest of existing water rights, but should also provide mechanism to make water available for redress. This is to be addressed by the new Water and Sanitation Act.

The sanitation sector is currently regulated by three policy documents, namely the White Paper on Water Supply and Sanitation (1994); the White Paper on a National Water Policy of South Africa (1997) and the White Paper on Basic Household Sanitation (2001) that provide a suit of procedures, rules and allocation mechanisms for sanitation in the country. The Department is in the final stages of finalising the reviewed single Sanitation Policy. This will be followed by the finalisation of a consolidated Water and Sanitation Policy.

As sanitation is a critical link in the water value chain and is not currently accounted for in the NWRS-2, the Department has commenced with the process to review the NWRS-2 to include the sanitation function and thus to ensure that the full value chain of water is incorporated in the planning processes of the water and sanitation sector.

A key regulatory measure being pursued by the Department is the development of an appropriate model for the regulation of water tariffs, this includes the establishment of an economic regulator for the water sector and the development of a water tariffs mechanism that entitles consumers to a basic level of provision, after which a tariff would be applicable.

Contributing to socio-economic development

The role of water and sanitation in the socio-economic development of the country is explicitly defined in the NDP and, as reflected in earlier sections of this strategic plan, the Department drives a number of activities that contribute to this macro-economic outcome; firmly expressed in the mission of the Department. This role has been given further credence in the nine-point economic intervention plan in defining the crucial contribution water and sanitation as a cross cutting priority to support all economic programmes.

As the economy grows, so does the demand for water and sanitation, requiring not only the roll out of new infrastructure but also interventions to curtail the high levels of financial losses. This is evidenced by *inter alia*: high water leakages; poor infrastructure planning; weak investment; weak operations and maintenance; inefficient revenue and debt management; and pollution of the resource leading to high treatment costs. Efficiency and cost management is thus a key imperative of the Department in leading the sector, as in asserting its position as the custodian of water in the sector.

A number of issues further define the socio-economic delivery environment including, among others, inequality in water allocation and access to water services and sanitation; the growing impatience of communities as reflected by increases in service delivery protests; the affordability of water against the constitutional right to water; unemployment; and the unique circumstances that rural communities face.

It is well documented that women bear the brunt of poor service delivery, particularly in rural areas. Furthermore, unemployment and the concomitant lack of skills development and job opportunities have the highest impact on the youth of the country. The DWS is therefore committed to alleviating the plight of women through its programmes and to ensuring it invests in the youth through skills development, targeted procurement and the provision of job opportunities.

The Department specifically supports and leads the rural development programme through the roll out of rainwater harvesting programmes; providing financial support to resource poor farmers in support of enhanced access to water; and by driving a variety of related job creation initiatives. Skills development across the sector is prioritised in this revised strategic plan, aimed at affording the youth opportunities to enter the sector through available bursary schemes and the graduate programme.

Advancing technology and innovation in support of the water and sanitation sector

The challenges of the water and sanitation sector cannot be addressed by utilising existing technologies alone. As signatories to the UN's sustainability development goals and the commitments of COP21, compounded by the harsh realities of water scarcity and drought, the need to rapidly attain water security and access to water and sanitation services for all in the country is highly reliant on the adoption of new technologies and innovation. The research into, and adoption of, new technologies in the areas of sanitation, water quality monitoring, infrastructure development, maintenance and operations are thus critical to the sector.

The DWS, through its entity the Water Research Commission (WRC), plays a vital role in understanding the needs and priorities of the sector and stimulating and funding research, promoting the transfer of information and technology and enhancing knowledge and capacity building in the water sector. The focus is also on integrated water resources management, water-linked eco-systems, water use and waste management and water use in agriculture.

The key areas of research being undertaken by the WRC in support of the DWS strategic plan include among others, water sensitive design; environmental goods and services; dam safety; climate change adaptation; non-flush sanitation; as well as support on the development of water and sanitation policy, legislation and strategy. A design school of infrastructure has also been established to support the sector with smart technologies and innovation in infrastructure operations, maintenance and development.

The adoption of new technologies does however have implications and requires a comprehensive training and development plan in light of the skills gap that exists to operate these new technologies. A sector skills development plan is under development, and the DWS has designed an internal skills development, retention and succession plan to enhance its human resource development capacity.

6.3 Organisational environment

A number of changes within the internal organisational environment have been put in place to facilitate improved service delivery and further changes are anticipated during upcoming financial years.

During the 2014/15 financial year, the department finalised its review of its organisational structure that required among other things the incorporation of the sanitation function and the infusion and streamlining of the activities of the regional offices (previously under the Regional and Implementation Support budget programme). In other words, all planning activities have been integrated, with water resources and water services infrastructure integrated in one programme and all regulation functions incorporated within the regulation budget programme.

A separation has always been made of the activities that have been funded through the fiscus and those funded through the Water Trading Entity (WTE). In an effort of implementing its Institutional Reform and Realignment, the department undertook a rigorous exercise to separate its functions to those of the Catchment Management Agencies (CMAs). As the departmental provincial offices have been incubating proto - CMAs, with their anticipated establishment to fully fledged CMAs this separation is now prominent within the WTE section. The establishment of the CMAs will see a reduction in the budget and departmental staff over the next three to five years as functions and staff are transferred to the CMAs.

The figure below indicates the changes to the budget structure as well as the associated funding mechanisms.

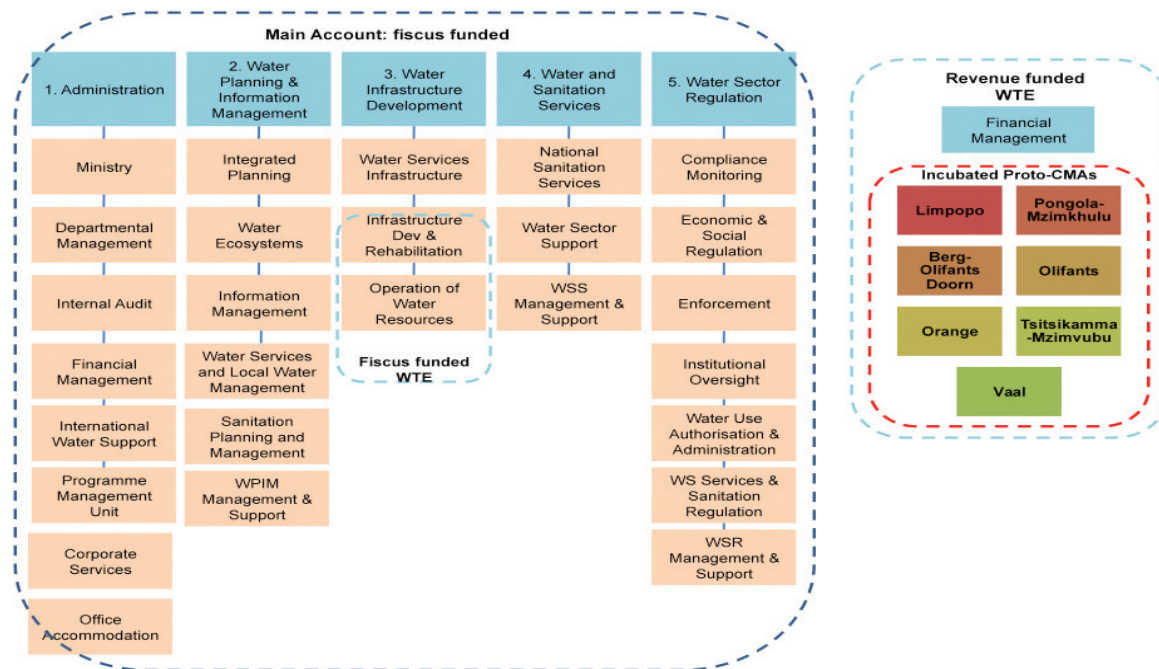


Figure 4: Insert description

In considering the ongoing relevance of the above structure, a detailed internal-environment analysis was conducted as part of the strategic planning process, detailing the key issues impacting on the work of the Department. The detailed stakeholder analysis and SWOT analysis are attached as annexures, with the below reflecting the salient points for the Department over the medium term period.

Given the constraints on the fiscus, the structure must ensure that focus and priority is given to the core issues defined in the mandate, namely:

- Delivering on time quality Water Resources Infrastructure;
- Best planning for and addressing water demand management;
- Ensuring water quality enhancement and eco-system protection; and
- Driving the delivery of water and sanitation services and addressing water sanitation backlogs.

In this regard, the capacity, capabilities and therefore structure of the DWS must ensure consideration is given to:

- Water user licensing as a priority, which must be a demonstration of progress in dealing with these issues and capacity must be deployed to deliver in this area;
- Massifying the use of conditional grants in local communities through support to the 5 pillars of the “back to basics programme”;
- Reconsideration and ensuring alignment of the mandates and focus areas of the directorates of the Department and the Entities;
- Ensuring that the Department focuses on its mandate for policy, regulation and providing leadership to the sector;
- Building the capacity of the state through the use of agencies/ entities as implementation agents: Consideration to be given to the establishment of a National Water and Sanitation Infrastructure Agency, as an entity of the DWS;
 - Consider the merging of certain Water Boards where necessary in view of the capacity constraints and governance costs associated with separate Boards;

- Closer participation and engagement with communities so as to keep them informed, each step of the way, as the implementation of projects progresses;
- Corporate support functions are indeed acting in that role; and that no corporate support function operates separately from the core delivery mandate (eg: International Relations - responsible for implementation of mandate aligned agreements and therefore ensure all trips are directly relevant to the mandate of the Department; HR – ensure all human resources management and development strategies and programmes are specifically aligned to needs of programmes on the ground; ICT – ensure systems are informed by and integrated and aligned with work of DWS and entities, etc.)
- Building capacity and capability to secure the “crowding in” of partners from both the international and regional and national space, to support DWS and the sector in achieving its developmental agenda;
- Ensuring capacity and capability for research, innovation and technological transfer across the DWS operations is enhanced and supported.
- Strengthening supply chain processes / models and budget prioritisation to ensure supportive supply chain processes, a strategic demand management plan in line with master plans that resolves multi-year project issues, and budgets that are managed in line with approved master plans.
- Enhancing governance, control and internal operations so as to get the basics right and achieve a clean audit outcome for the main account and WTE; achieve MPAT 1.5 objectives across the operations and implement streamlined internal systems and processes supportive of effective and efficient delivery of the core service delivery mandate of the Department and the sector.

6.4 Description of the strategic planning process

A comprehensive strategic review of the 2015/16 to 2019/20 was undertaken on 29-30 June 2015 to strengthen the alignment of water and sanitation planning with crucial policy imperatives, particularly the NDP, MTSF and NWRS-2 (2013). As the intention was also to streamline policy and strategy coherence across the sector, it was decided that this strategic plan needs to adopt a sectoral focus. This would allow for the DWS entities and other key sectoral partners to align their respective strategies with that of the sector.

The DWS strategic planning session was held on 19-20 August 2015, attended by the Senior Management of the Department and CEs / Senior Management of the Entities. The purpose of the session was to:

- Appreciate the strategic context of the role and work of DWS and the broader sector;
- Assess and respond to shifts in the environment, in particular, to consider and mainstream key policy frameworks pertaining to the priorities and focus for the period;
- Assess and respond to shifts in the sectoral delivery environment, towards the development of a sector-wide, rather than DWS, strategic plan for the planning period;
- Review and refine the strategic framework and architecture of DWS and the sector it leads, in particular, the vision, mission, values and strategic goals of the sector.

Prepare first drafts of the 5-Year Strategic Plan and aligned 2016/17 Annual Performance Plan – as per Treasury requirements and associated timelines, for submission to DPME and National Treasury on 31 August 2015.

A further session was held on 28-29 January 2015 with the DWS Minister, Deputy Minister, Senior Management Team and Senior Management of the entities to comment on the draft documents and revise as required. The final revisions to the documents based on further inputs from the National Treasury will result in the approved documents by the Minister and the final tabling in Parliament by March 2016.

In the drafting of this Strategy Plan, particular care was taken in the finalisation of the outcomes oriented goals and programme strategic objectives to ensure that they meet the SMART principle of specific, measurable, achievable, realistic, and time bound.

7 Strategic outcome oriented goals

The five (5) strategic outcome-orientated goals are as follows:

Goal 1 - Enhanced and protected water as a resource across the value chain

Strategic outcome oriented goal 1	Enhanced and protected water as a resource across the value chain
Goal statement	<p>The DWS will protect water resources across the value chain by:</p> <ul style="list-style-type: none"> • Monitoring the regulatory compliance levels using the approved regulatory assessment and compliance tool • Developing an Integrated National Water Resources Monitoring System that enhances the reliability of water monitoring information. • Classifying and determining resource quality objectives for 17 river systems by 2020/21 • Completing 5 annual status assessments for the 8 large water supply systems by 2020/21 • Producing a 5 year end of term analysis on the implementation of the National Acid Mine Drainage long term programme

Goal 2 - Equitable access to reliable, sustainable and acceptable water resources and water and sanitation services

Strategic outcome oriented goal 2	Equitable access to reliable, sustainable and acceptable water resources and water and sanitation services
Goal statement	<p>The DWS will ensure equitable access by:</p> <ul style="list-style-type: none"> • Annually updating the National Water and Sanitation Master Plan (NWSMP) with the 10 year infrastructure development horizon. • Completing plans for 86 bulk water supply and sanitation services infrastructure projects by 2020/21 • Completing up to 336 bulk water supply and sanitation services infrastructure projects by 2020/21 • Developing and implementing the National Asset Management Plan (NAMP) and annually assessing progress from 2017/18 onwards

Goal 3 - An enhanced contribution to socio-economic development and transformation by the sector

Strategic outcome oriented goal 3	An enhanced contribution to socio-economic development and transformation by the sector
Goal statement	<p>The DWS will enhance its contribution by:</p> <ul style="list-style-type: none"> • Implementing the revised water allocations within stressed catchments • Annually implementing 2 targeted rural development initiatives to support smallholder farmers • Spending up to 80% BBBEE procurement on empowering suppliers as a percentage of the total procurement expenditure by 2020. • Annually implementing infrastructure programmes creating job opportunities



Goal 4 - An efficient, effective and development oriented water and sanitation sector

Strategic outcome oriented goal 4	An efficient, effective and development oriented water and sanitation sector
Goal statement	<p>The DWS will increase efficiency and effectiveness by:</p> <ul style="list-style-type: none"> • Finalising the Water and Sanitation Amendment Act by 2017/18 • Annually analysing the performance of the DWS entities against signed shareholder compacts • Obtaining an unqualified audit outcome, with no matters of emphasis for both the Main and Water Trading accounts by 2020/21. • Standardising the workplace skills plan for the water sector by 2018/19 and implementing it from 2019/20 onwards.

Goal 5 - Sound cooperative governance and an active and engaged citizenry

Strategic outcome oriented goal 5	Sound cooperative governance and an active and engaged citizenry
Goal statement	<p>The DWS will enhance cooperative governance and active citizenry by:</p> <ul style="list-style-type: none"> • Producing an end of term analysis on the implementation of the Africa and global international relations programme. • Producing an end of term analysis on the implementation of Partnerships, Communications and Stakeholder Relations Programme





Part B

Strategic objectives

8 Programme descriptions

The strategic objectives that have been identified are related to and discussed within the context of the approved budget programme structure.

8.1 Programme 1: Administration

This programme provides strategic leadership, management and support services to the department. Strategically manage mine water. Develop and promote international relations on water resources between neighbouring countries.

8.1.1 Sub-programmes

Ministry provides for administrative and logistical support to the Minister and Deputy Minister as well as support staff and makes provision for their salaries.

Departmental Management provides policy and strategic direction for water and sanitation management including enterprise-wide support services comprising of administrative support to the Director General, corporate planning, monitoring and evaluation as well as the provision of salaries and operation budget of the department's regional office heads.

Internal Audit provides independent, objective assurance and advisory services designed to add value and improve the department's operations.

Corporate Services provides enterprise-wide support services comprising of human resources, legal services, communications, learning and development academy and transformation policy and coordination.

Financial Management ensures the efficient management of daily financial operations, processes and systems.

Programme Management Unit provides for improving the coordination and governance in the management of departmental projects including the management of mine water in South Africa (with specific emphasis on acid mine management).²

International Water Support strategically develops, promotes and manages international relations on water and sanitation between countries through bilateral and multilateral cooperation instruments and organisations in line with the legislative provisions. Pursue national interests at both African multilateral and global multilateral organisations and forums.

Office Accommodation makes payments for rental charges on all leased office space occupied by the department, as well as for the municipal services such as electricity, water, and sewage and waste removal.

8.1.2 Programme strategic objectives

Strategic objective 3.3: Targeted procurement that supports black entrepreneurs in the sector

SG 3: An enhanced contribution to socio-economic development and transformation by the sector	
Strategic objective 3.3.	Targeted procurement that supports black entrepreneurs in the sector
Objective statement	To spend 80% of the procurement budget on BBBEE compliant suppliers
Baseline 2014/15	New indicator

² Although the programme structure has not changed, the acid mine management function is performed by sub-programme Water Sector Regulation Management and Support under programme 5. This PMU purpose would thus be updated when the budget structure is being reviewed during the 2016/17 financial year.

Strategic objective 4.3: An efficient, effective and high performing organisation

SG 4: An efficient, effective and development oriented water and sanitation sector	
Strategic objective 4.3.	An efficient, effective and high performing organisation
Objective statement	To obtain an unqualified audit outcome on the financial and non-financial data for the Main Account and Water Trading from 2016/17 onwards
Baseline 2014/15	Qualified audit outcome for the Main Account and an unqualified audit outcome with matters of emphasis for the WTE

Strategic objective 5.1: Targeted and sustained African and global cooperation in support of the national water and sanitation agenda

SG 5: Sound cooperative governance and an active and engaged citizenry	
Strategic objective 5.1	Targeted and sustained African and global cooperation in support of the national water and sanitation agenda
Objective statement	To finalise the Africa and global international relations programme by 2016/17 and annually monitor its implementation from 2017/18 onwards.
Baseline 2014/15	New indicator

Strategic objective 5.2: Informed and empowered communities and responsive government securing integrated and sustainable partnerships to support the W&S development agenda

SG 5: Sound cooperative governance and an active and engaged citizenry	
Strategic objective 5.2	Informed and empowered communities and responsive government securing integrated and sustainable partnerships to support the water and sanitation development agenda
Objective statement	To finalise the Partnerships, Communications and Stakeholder Relations Programme by 2016/17 and annually monitor its implementation from 2017/18 onwards.
Baseline 2014/15	New indicator

8.1.3 Resource considerations

The programme's average growth rate over the medium term is projected to be 6.1% as the budgets for the Financial Management and Departmental Management are going to increase by 10.6% and 9% respectively over the medium term. As at 31 March 2016, the programme would be having 2 454 funded post with 104 posts additional to the establishment.

8.1.4 Risk management

The risks that may affect the realization of the strategic objectives for this programme are:

Strategic goal	Strategic objective	Associated risks	Risks description	Consequences	Mitigation measures
3. An enhanced contribution to socio-economic development and transformation by the sector	3.3. Targeted procurement that supports black entrepreneurs (QSE's and EME's) in the sector	Misrepresentation of company shareholding by service providers	Companies are misrepresenting their shareholding to obtain tenders	Possible awarding of tenders to companies that don't actually qualify and possible non-adherence to the BBBEE Act	Access to CIPC website by SCM officials to confirm shareholding
	4.3. An efficient, effective and high performing organisation	Absence of an approved IT strategy Qualified audit report	Not having the strategy in place will result in IT not being able to support the business Qualified audit report leading to negative reputation	IT not providing adequate services to business. Loss of stakeholder confidence. Reputational damage Financial loss	Approval and implementation of the IT Strategy. Implementation of the Audit Action Plan Implementation and monitoring of policies Process re-engineering of SCM
5. Sound cooperative governance and an active and engaged citizenry	5.1. Targeted and sustained African and Global cooperation in support of the national water and sanitation agenda	Countries not committing to cooperation	There are challenges with the implementation of agreements	Agreements with their related activities will not be implemented	Ensure continued coordination with DIRCO political desks
	5.2. Informed and empowered communities and responsive government securing integrated and sustainable partnerships to support the W&S development agenda	Negative perception of government by the general public	In general the public perceives government negatively	Reputational damage	Multi-media campaigns will be instituted.

8.2 Programme 2: Water Planning and Information Management

The programme is responsible to ensure that the country's water resources are protected, used, developed, conserved managed and controlled in a sustainable manner for the benefit of all people and the environment by developing a knowledge base and implementing effective policies, procedures and integrated planning strategies for water resources and water and sanitation services.

8.2.1 Sub-programmes

Water Planning, Information Management and Support provide strategic leadership and overall management of the programme.

Integrated Planning develops comprehensive plans that guide infrastructure development, systems and services management in the water sector. This entails preparing reconciliation strategies, drafting feasibility plans, compiling the integrated hydrological plan, undertaking options analyses and macro planning.

Water Ecosystems develops and implements measures to protect water resources. This entails determining resource directed measures by classifying water resource systems, determining reserves, conducting resource quality assessments and determining resource directed measures by developing pollution control guidelines and rehabilitation measures and protocols.

Water Information Management ensures the development and maintenance of systems and programmes for data and information acquisition and management as well as building the knowledge base on all aspects of water for informed water management decisions.

Water Services and Local Water Management entails the formulation and development of strategies, guidelines and plans for water services and the management of water at a local level. The function ensures that all people in South Africa have access to effective, sustainable and affordable water services through policy and legislative framework, information and planning, support as well as monitoring, evaluation and reporting.

Sanitation Planning and Management develops the national strategy for the planning of sanitation services and provides planning support to municipalities for the provision of sustainable sanitation services.

8.2.2 Programme strategic objectives

Strategic objective 1.2: Enhanced management of water and sanitation information

SG 1: Enhanced and protected water as a resource across the value chain	
Strategic objective 1.2	Enhanced management of water and sanitation information
Objective statement	To develop an Integrated National Water Resources Monitoring Strategy by 2016/17 and implement it from 2017/18 onwards.
Baseline 2014/15	Two technical reports on user requirements completed for the review of the existing water monitoring networks.

Strategic objective 1.3: The integrity of freshwater ecosystems protected

SG 1: Enhanced and protected water as a resource across the value chain	
Strategic objective 1.3	The integrity of freshwater ecosystems protected
Objective statement	To classifying and determine resource quality objectives for 17 river systems by 2020/21
Baseline 2014/15	0 however 4 draft resource quality objectives reports developed

Strategic objective 1.4: Enhanced water use efficiency and management of water quality

SG 1: Enhanced and protected water as a resource across the value chain	
Strategic objective 1.4	Enhanced water use efficiency and management of water quality
Objective statement	Completing 5 annual status assessments for the 8 large water supply systems by 2020/21
Baseline 2014/15	Amended indicator

Strategic objective 2.1: A coordinated approach to water and sanitation infrastructure planning and monitoring and evaluation

SG 2: Equitable access to reliable, sustainable and acceptable water resources and water and sanitation services	
Strategic objective 2.1	A coordinated approach to water and sanitation infrastructure planning and monitoring and evaluation
Objective statement	To complete the 10 year horizon National Water and Sanitation Master Plan (NWSMP) by 2018/19 and annually updated from 2019/20 onwards
Baseline 2014/15	New indicator

Strategic objective 2.2: Targeted and aligned planning for adequate water availability and the enhanced provision of water supply and sanitation services

SG 2: Equitable access to reliable, sustainable and acceptable water resources and water and sanitation services	
Strategic objective 2.2	Targeted and aligned planning for adequate water availability and the enhanced provision of water supply and sanitation services
Objective statement	To complete plans for 86 bulk water supply and sanitation services infrastructure projects by 2020/21
Baseline 2014/15	Amended indicator

8.2.3 Resource considerations

The programme's average growth rate over the medium term is projected to be 6.7% as the budgets for the Water Ecosystem sub-programme would increase by 12.5% over the medium term. As at 31 March 2016, the programme would be having 1 138 funded post with 39 posts additional to the establishment.

8.2.4 Risk management

Strategic goal	Strategic objective	Associated risks	Risks description	Consequences	Mitigation measures
SG 1: Enhanced and protected water as a resource across the value chain	SO 1.2. Enhanced management of water and sanitation information	Ineffective planning and poor decision making in water Information Management Reduced water quality and service reliability	Gaps in the DWS data records leading to poor service delivery The quality of water in the water resource systems needs improvement	Decrease optimal design and operations and critical water related infrastructure Inability to comply to minimum required standards(monitoring requirements, effluent discharges and resource quality objective)	Review of the monitoring networks (report and strategy) Develop the water monitoring network implementation strategy
	SO 1.3. The integrity of fresh water ecosystems protected	Degradation of ecological health and services	Degradation of the eco systems	Poor water quality	Determine water classes and quality objectives (setting the standards and guidelines).
	SO 1.4. Enhanced water use efficiency and management of water quality	Lack of climate change data availability and reliability from external stakeholders Wastage of water	Data received from external stakeholders is not reliable Inefficient use of water that leads to increased water shortages	Insufficient information for planning to deal with climate change related impact Failure to provide water to communities Water security may be compromised	Establishing MOUs with the identified external stakeholders to improve the quality of data Annual analysis on status of water losses in the 8 large water supply systems Integrated approach to education and awareness
SG 2: Equitable access to reliable, sustainable and acceptable water resources and water and sanitation services	SO 2.1. A coordinated approach to water and sanitation infrastructure planning and monitoring and evaluation	Ageing infrastructure at a municipal level which results in the wastage of water and pollution of water resources	Ageing water infrastructure causes increased wastage of water and pollution	Wastage of water and pollution of water resources Unreliable water and sanitation services	Development of reliable water and sanitation service delivery implementation plans for District Municipalities.
	SO 2.2. Targeted and aligned planning for adequate water availability and the enhanced provision of water supply and sanitation services	Increased demand for water provision causes a strain on existing water resources	Increased demand for water causes a strain on the available water resource	Shortage of water Service delivery protests	Develop and update (maintain) the reconciliation strategies Develop feasibility plans to meet future water requirements

8.3 Programme 3: Water Infrastructure Development

The programme is responsible to develop, rehabilitate and refurbish raw water resources and water and sanitation services infrastructure to meet the socio-economic and environmental needs of South Africa.

8.3.1 Sub-programmes

Water and Sanitation Services Infrastructure provides for the construction of new and rehabilitating existing water services infrastructure, including the transfer of water services schemes to water services institutions (inclusive of Regional Bulk Infrastructure Grant, Accelerated Community Infrastructure Programme, Municipal Water Infrastructure Grant, Water Services Operating Subsidy Grant and Transfer Schemes). Building the knowledge base on all aspects of water and sanitation for informed water and sanitation management decisions.

Infrastructure Development and Rehabilitation provides for the design, construction and commissioning of new water resource infrastructure and the rehabilitation of existing infrastructure to ensure the safety and functionality of departmental dams and related infrastructure.

Operations of Water Resources funds expenditure on water resources management, activities conducted by the department or catchment management agencies within water management areas.

8.3.2 Programme strategic objectives

Strategic objective 2.3: Adequate water availability and enhanced provision of sustainable and reliable water supply and sanitation services

SG 2: Equitable access to reliable, sustainable and acceptable water resources and water and sanitation services	
Strategic objective 2.3	Adequate water availability and enhanced provision of sustainable and reliable water supply and sanitation services
Objective statement	To complete over 600 bulk water supply and sanitation services infrastructure projects by 2020.
Baseline 2014/15	New indicator

Strategic objective 2.4: Safe, reliable and sustainable water supply and water and sanitation services infrastructure

SG 2: Equitable access to reliable, sustainable and acceptable water resources and water and sanitation services	
Strategic objective 2.4	Safe, reliable and sustainable water supply and water and sanitation services infrastructure
Objective statement	To develop the National Asset Management Plan (NAMP) by 2016/17 and annually assessing progress on implementation from 2017/17 onwards.
Baseline 2014/15	New indicator

Strategic objective 3.4: Job opportunities created that expand economic opportunities for historically excluded and vulnerable groups

SG 3: An enhanced contribution to socio-economic development and transformation by the sector	
Strategic objective 3.4	Job opportunities created that expand economic opportunities for historically excluded and vulnerable groups
Objective statement	Annually implementing 3 infrastructure programmes creating job opportunities
Baseline 2014/15	Amended indicator

8.3.3 Resource considerations

The programme's average growth rate over the medium term is projected to be 5.1% as the budgets for the Infrastructure Development and Rehabilitation, Operation of Water Resources and Water Services Infrastructure sub-programme would increase by 10.5%, 3.6% and 4.1% respectively over the medium term.

The increase in the Water Services Infrastructure sub-programme reflects the more than R12 billion medium term funding that would be provided to mainly the 27 priority district municipalities through the new Water Services Infrastructure Grant to provide for inter alia water and refurbishment of wastewater treatment works.

As at 31 March 2016, the programme would be having 391 funded post with 1 post additional to the establishment.

8.3.4 Risk management

Strategic goal	Strategic objective	Associated risks	Risks description	Consequences	Mitigation measures
SG 2: Equitable access to reliable, sustainable and acceptable water and resources and water and sanitation services	SO 2.3 Adequate water availability and enhanced provision of sustainable and reliable water supply and sanitation services	The SCM strategy does not support the construction and engineering business environment	The SCM processes does not support the construction/engineering environment	<ul style="list-style-type: none"> Project delays Negative impact on service delivery Community protest/unrest Under spending of budget 	<ul style="list-style-type: none"> Review of the SCM Strategy Regular engagements with the CFO to address SCM challenges on critical projects
	SO 2.4: Safe, reliable and sustainable water supply and water and sanitation services infrastructure	Inability to guarantee sustainable provision and maintenance of bulk raw water infrastructure	Inability to guarantee the continuous provision of bulk raw water infrastructure	<ul style="list-style-type: none"> Negative impact on service delivery Service delivery protests Service delivery protests 	<ul style="list-style-type: none"> Develop and Implement the Resource management plans., water infrastructure plans, asset management strategy, operations and maintenance plans, rehabilitation and refurbishment plans and EPPs. Develop and Implement the following: <ul style="list-style-type: none"> Resource management plans, water infrastructure plans

8.4 Programme 4: Water and Sanitation Services

The programme is responsible to ensure the provision of sustainable water and dignified sanitation services, including implementation support and advocacy to support household health and dignity.

8.4.1 Sub-programmes

Water and Sanitation Services Support provides strategic leadership and overall management of the programme.

National Sanitation Services supports the development of infrastructure for sanitation services for improved quality of life.

Water Sector Support provides for the implementation of rainwater harvesting tanks and financial support to resource poor farmers including sector guidance, best practice and innovation on sustainable water provision and sanitation services.

8.4.2 Programme strategic objectives

Strategic objective 2.5: Enhanced provision of sustainable and dignified basic sanitation

SG 2: Equitable access to reliable, sustainable and acceptable water resources and water and sanitation services	
Strategic objective 2.5	Enhanced provision of sustainable and dignified basic sanitation
Objective statement	To eradicate the sanitation backlog in over 26 000 rural households and replacing bucket sanitation systems in formal settlements in over 4 000 households
Baseline 2014/15	29 928 households

Strategic objective 3.2: Targeted rural development initiatives that support smallholder farmers

SG 3: An enhanced contribution to socio-economic development and transformation by the sector	
Strategic objective 3.2	Targeted rural development initiatives that support smallholder farmers
Objective statement	To annually implement 2 targeted rural development initiatives that support smallholder farmers
Baseline 2014/15	2 (i.e. resource poor farmers and water harvesting programmes)

Strategic objective 4.4: Coordinated development of the skills pool across the sector

SG 4: An efficient, effective and development oriented water and sanitation sector	
Strategic objective 4.4	Coordinated development of the skills pool across the sector
Objective statement	To standardise the workplace skills plan for the water sector by 2018/19 and annually monitoring progress from 2019/20 onwards
Baseline 2014/15	New indicator

8.4.3 Resource considerations

The overall programme's average growth rate over the medium term is projected to decrease by 34.7% as the budgets for the National Sanitation Services sub-programme would have a decrease of 56.5% over the medium term. The decrease in this sub-programme's budget reflects the completion of the bucket eradication programme. As at 31 March 2016, the programme would be having 559 funded post with 7 posts additional to the establishment.

8.4.4 Risk management

Strategic goal	Strategic objective	Associated risks	Risks description	Consequences	Mitigation measures
SG 2: Equitable access to reliable, sustainable and acceptable water resources and water and sanitation services	SO 2.5: Enhanced provision of sustainable and dignified basic sanitation	Availability of funding to respond to sanitation backlog	<ul style="list-style-type: none"> Availability of funding to respond to sanitation backlog 	<p>Limited acceleration in the eradication of sanitation backlog</p> <p>Service delivery protests Environmental (contamination of water systems), Health (outbreak of water borne diseases) and Safety (and Reputation) risks</p>	Engage with COGTA on sanitation priority projects and funding allocation from provincial sources (Municipal Infrastructure Grants and Urban Settlement Dev. Grants)
SG 3: An enhanced contribution to socio-economic development and transformation by the sector	SO 3.2: Targeted rural development initiatives that support smallholder farmers	The provisions in the Resource Poor Farmers (RPF) policy does not adequately address the needs of the intended beneficiaries	<ul style="list-style-type: none"> The provisions in the Resource Poor Farmers (RPF) policy does not adequately address the needs of the intended beneficiaries 	<p>Targeted beneficiaries will not have access to the financial subsidies</p>	Review of the policy framework and regulations on Resource Poor Farmers
SG 4: An efficient, effective and development oriented water and sanitation sector	SO 4.4: Coordinated development of the skills pool across the sector	Shortage of skilled and technical people at National and Municipal Level	<ul style="list-style-type: none"> There is a general shortage of skilled and technical people in the sanitation sector in the country 	<ul style="list-style-type: none"> Impacts on the delivery of services Reputational damage 	<p>Develop training programmes towards scarce and critical skills in collaboration with SETA's and DBSA</p> <p>Review of the detailed occupation framework for the water sector</p>

8.5 Programme 5: Water Sector Regulation

The programme is responsible for ensuring the development, implementation, monitoring and review of regulations across the water and sanitation value chain in accordance with the provisions of the National Water Act (1998), the Water Services Act (1997) and related water and sanitation policies.

8.5.1 Sub-programmes

Water Sector Regulation Management and Support provides strategic leadership and overall management of the programme.

Compliance Monitoring coordinates and monitors compliance to standards, license conditions and regulations across the full water and sanitation value chain.

Economic and Social Regulation ensures that pricing is efficient and cost reflective, achieves value for money for consumers and, where appropriate, that trade-offs are made between the cost, quality and sustainability of services, focusing on developing finance and pricing strategies.

Enforcement ensures that a range of actions, both administrative and criminal, are taken against organisations and/or individuals for non-compliance with sector regulation and policy.

Institutional Oversight involves institutional governance and oversight of all water institutions, and facilitates their establishment, development, strategic alignment and performance monitoring and evaluation.

Water Use Authorisation and Administration enables equitable access to water-use through the application of various regulatory instruments.

Water Supply Services and Sanitation Regulation regulates the provision of drinking water and the management of wastewater.

8.5.2 Programme strategic objectives

Strategic objective 1.1: Water resources protected through water supply and sanitation services regulation, compliance monitoring and enforcement

SG 1: Enhanced and protected water as a resource across the value chain

Strategic objective 1.1	Water resources protected through water supply and sanitation services regulation, compliance monitoring and enforcement
Objective statement	To developing a regulatory assessment and compliance tool by 2017/18 and annually assessing water users' compliance from 2018/19 onwards.
Baseline 2014/15	New indicator

Strategic objective 1.5: Freshwater eco-systems protected from Acid Mine Drainage

SG 1: Enhanced and protected water as a resource across the value chain

Strategic objective 1.5	Freshwater eco-systems protected from Acid Mine Drainage
Objective statement	To develop the National Acid Mine Drainage long term programme by 2016/17 and annually analyzing progress from 2017/18 onwards
Baseline 2014/15	Amended indicator

Strategic objective 3.1: Equitable water allocation and availability for socio-economic development

SG 3: An enhanced contribution to socio-economic development and transformation by the sector	
Strategic objective 3.1	Equitable water allocation and availability for socio-economic development
Objective statement	Implementing the revised water allocations within 9 catchments
Baseline 2014/15	Amended indicator

Strategic objective 4.1: An enabling environment for the management of water resources and the provision of basic water and sanitation services across the sector

SG 4: An efficient, effective and development oriented water and sanitation sector	
Strategic objective 4.1	An enabling environment for the management of water resources and the provision of basic water and sanitation services across the sector
Objective statement	To develop the Water and Sanitation Amendment Act by 2017/18
Baseline 2014/15	Amended indicator

Strategic objective 4.2: Sound governance and oversight of the DWS Public Entities

SG 4: An efficient, effective and development oriented water and sanitation sector	
Strategic objective 4.2	Sound governance and oversight of the DWS Public Entities
Objective statement	To complete 5 annual appraisals on the performance of the DWS entities against signed shareholder compacts by 2020/21.
Baseline 2014/15	Amended indicator

8.5 Resource considerations

The programme's average growth rate over the medium term is projected to be 5.9% as the budgets for the Economic and Social Regulation, Water Use Authorisation and Administration and Water Supply Services and Sanitation sub-programme would increase by 17.6%, 16.1% and 11.5% respectively over the medium term. As at 31 March 2016, the programme would be having 452 funded post with 46 posts additional to the establishment. The increase in the Economic and Social Regulation budget reflects the department's intention of finalising the raw water pricing regulations and associated norms and standards for full cost recovery on water schemes.

8.5.2 Risk management

Strategic goal	Strategic objective	Associated risks	Risks description	Consequences	Mitigation measures
SG 1: Enhanced and protected water as a resource across the value chain	SO 1.1: Water resources protected through water supply and sanitation services regulation, compliance monitoring and enforcement	Declining or poor water quality	Declining or poor water quality due to increased unlawful water use, non-adherence of norms and standards	<ul style="list-style-type: none"> Possible health related sickness Possible loss of life Increases in costs to purify the water Decline in the availability of water Citizens may become ill or there may be loss of life due to the quality of the water 	<ul style="list-style-type: none"> Implementation of Compliance Monitoring Strategy Development of an integrated Compliance and Enforcement Strategy Improved cooperation between DEA and DMR with DWS - using Environmental Management Inspectors (EMIs) to access powers under Strategic Environmental Management Acts (SEMAS).
	SO 1.5 Freshwater eco-systems protected from Acid Mine Drainage	Lack of alternatives to fund AMD mitigation projects	Lack of alternative mechanisms to fund AMD mitigation projects resulting in the inability to implement the projects	<ul style="list-style-type: none"> Impact on eco systems Declining water quality Impact on water security 	<ul style="list-style-type: none"> Identify and approve suitable disposal facilities for AMD Identify and approve suitable revenue streams to fund AMD mitigation costs Development of mine water management policy Development and implementation of the levy for mine water management
SG 3: An enhanced contribution to socio-economic development and transformation by the sector	SO 3.1: Equitable water allocation and availability for socio-economic development	Ineffective water authorisation regulatory regime	Ineffective water authorisation regulatory regime resulting in high instances of non-compliance	Inability to effectively monitor compliance or prosecute	<ul style="list-style-type: none"> Implementation of the national integrated information system Development of the DWS stakeholder management strategy Education initiatives to promote water saving Develop and implement the new policy for the reallocation of water

Strategic goal	Strategic objective	Associated risks	Risks description	Consequences	Mitigation measures
SG 4: An efficient, effective and development oriented water and sanitation sector	SO 4.1: An enabling environment for the management of water resources and the provision of basic water and sanitation services across the sector	Out-dated water pricing strategy	Out-dated water pricing strategy leading to inadequacies in addressing economic benefit	The water pricing strategy not clearly understood	<ul style="list-style-type: none"> Review of the water pricing strategy Monitoring of the implementation of the water pricing strategy once approved
	SO 4.2: Sound governance and oversight of the DWS public entities	Failure of the entities to meet their strategic objectives Delayed establishment of new entities/agencies	Failure of the entities to meet their strategic objectives leading to poor service delivery Delayed establishment of new entities/agencies resulting in non-achievement of the NDP targets	<ul style="list-style-type: none"> Poor service delivery Project not delivered on time Unspent funds Non-achievement of the NDP targets 	<ul style="list-style-type: none"> Review of the DWS Governance Oversight model Establishment of Governance Forums Review of the capacity requirements



Part C

[Link to other plans](#)

9 Links to long-term infrastructure and other capital plans

Tabulated below is the department's long term infrastructure and capital plans for the medium term

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
Mega water augmentation projects (total project cost of at least R1 billion over the project life cycle)						
1	Limpopo	Dam	Supply of water to new mining developments; augmentation of domestic water supplies to urban and rural users in the middle Olifants River catchment area and to various communities on the Nebo Plateau and Sekhukhune	SIP 1	Construction	3,074,000
2	Limpopo	Pumping stations, balancing pipelines, balancing dams, operational infrastructure and appurtenant structures	Construction of Flag Boshielo to Mokopane pipeline and second pipeline between Flag Boshielo to Mokopane	SIP 1	Feasibility	13,114,000
3	Limpopo	Pumping stations, balancing pipelines, balancing dams, operational infrastructure and appurtenant structures	Construction of bulk distribution works from Flag Boshielo to Mokopane, De Hoop to Steelpoort, Steelpoort to Mooihoek, Mooihoek to Olifantspoort and Nebo Plateau to Roosenekal	SIP 1	Construction	3,400,000
4	Limpopo	Pumping stations, balancing pipelines, balancing dams, operational infrastructure and appurtenant structures	Construction of second pipeline between Steelpoort weir to and Mooihoek	SIP 1	Feasibility	834,480
5	Limpopo	Pumping stations, balancing pipelines, balancing dams, operational infrastructure and appurtenant structures	Construction of second pipeline parallel to Lebalelo scheme and Lebalelo Scheme to Olifantspoort	Not related to SIPs	Construction	2,412,240
6	Limpopo	Dam, Water Treatment Plant, Pipelines, Reservoirs	Meeting of projected growing primary supply requirements to 2025, improvement of water availability for the riverine ecosystem and building of Nwamitwa Dam	SIP 1	Design	1,325,000
7	National	Dam	Rehabilitation of assets and improvement of dam safety	Not related to SIPs	Design	2,800,000

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
8 Water resources project: Raising of Clanwilliam Dam	Western Cape	Dam	Upgrading of existing dam to stabilise distortion and augmentation of agricultural water supply to meet increasing demands	SIP 5	Feasibility	2,500,000
9 Mokolo River and West Crocodile River water augmentation project (phase 1)	Limpopo	Pumping stations, pipelines, balancing dams, operational and national Key Point infrastructure and appurtenant structures	Augmentation of domestic and industrial water supply to the new Eskom/independent power producer stations to extend associated mining activities and accommodate growing population in the area	SIP 1	Construction	2,138,000
10 Mokolo River and West Crocodile River water augmentation project (phases 2A)	Limpopo	Pumping stations, pipelines, balancing dams, operational and national Key Point infrastructure and appurtenant structures	Augmentation of domestic and industrial water supply to the new Eskom/independent power producer stations to extend associated mining activities and accommodate growing population in the area	SIP 1	Construction	11,267,000
11 Lusikisiki regional water supply scheme: Zalu Dam on the Xura River	Eastern Cape	Bulk Water and Wastewater Infrastructure	Development of bulk water and wastewater infrastructure to enable the connection of municipal reticulation infrastructure	SIP 3	Feasibility	5,000,000
12 Acid Mine Drainage	National	Long term infrastructure	Construction of water treatment works	0	Feasibility	-
Mega water services projects (total project cost of at least R1 billion over the project life cycle)						
13 Pongolapoort bulk water scheme	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	1,100,000
14 Sedibeng bulk regional sewerage scheme remainder	Gauteng	Waste Water Services	Construction of new wastewater treatment works	SIP 18	Feasibility	1,200,000
15 OR Tambo Mthatha King Sabata Dalindyebo district municipality bulk water supply and sanitation	Eastern Cape	Bulk Water Supply	Augmentation of existing bulk water scheme	SIP 6	Construction	2,156,829
16 De Hoop: Greater Sekhukhune district municipality regional bulk water and wastewater infrastructure	Limpopo	Bulk Water Supply	Construction of new bulk water infrastructure linking communities with the De Hoop Dam	SIP 1	Design	4,088,000

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
17 Vaal Gamagara scheme	Northern Cape	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 11	Construction	2,000,000
18 Mogalakwena bulk water supply	Limpopo	Bulk Water Supply	Upgrading of boreholes and construction of new bulk water scheme	SIP 1	Construction	1,650,000
19 Nandoni water treatment works and distribution	Limpopo	Pumps, pipelines	Supply of water to Vhembe district municipality	Not related to SIPs	Construction	1,789,651
20 Polokwane wastewater treatment works	Limpopo	Bulk Water Supply	Upgrading existing wastewater treatment works	SIP 18	Design	1,043,836
21 Provincial high catalytic projects (Mutash Hub)	Limpopo	Bulk Water Supply	Construction of new bulk water scheme for various purposes	SIP 6	Feasibility	1,200,000
22 Umgeni Water Board: Lower Thukela bulk water supply scheme	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	1,043,968
23 Matoks bulk water supply	Limpopo	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Feasibility	1,000,000
24 Giyani Water Services	Limpopo	Bulk Water Supply	Construction of new bulk water scheme and upgrading existing bulk water scheme	SIP 6	Construction	2,211,429
25 Polokwane Bulk Water Supply	Limpopo	Bulk Water Supply	Construction of new bulk water scheme and upgrading existing bulk water scheme	SIP 6	Construction	1,432,000
26 Ngwathe bulk water supply (phase 2)	Free State	Waste Water Services	Construction of new bulk water scheme	SIP 18	Construction	160,000
27 Driekoppies bulk water supply upgrades	Mpumalanga	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Design	93,000
Large water augmentation projects (total project cost of at least R250 million but less than R1 billion over the project life cycle)						
28 Groot Letaba River water development project: Raising of Tzaneen Dam	Limpopo	Dam, Water Treatment Plant, Pipelines, Reservoirs	Meeting of projected growing primary supply requirements for 2025; improvement of water availability for the riverine ecosystem and raising of Tzaneen Dam	SIP 1	Design	125,000

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
29 Mdloti River development project: Raising of Hazelmere Dam	KwaZulu-Natal	Dam (radial crest gates)	Augmentation of water supply to Umgeni Water for treatment, for KwaZulu-Natal north coast	SIP 2	Design	360,000
30 Mopani district municipality emergency works	Limpopo	Dam	Refurbishing of dilapidated infrastructure	Not related to SIPs	Construction	80,000
31 Enterprise resource programme system upgrade	National	Software upgrade	Upgrading of Systems Applications and Products system	Not related to SIPs	Construction	205,000
32 National water resources infrastructure support/project management	National	Construction of a building	Funding of national office costs including construction, engineering, operations and new development	Not related to SIPs	Feasibility	-
33 Financial management/project support	National	0	Funding of financial management and SAP maintenance and support	Not related to SIPs	Feasibility	-
34 Mzimkulu River: Nowabeni off-channel storage	Eastern Cape	Dam, Water Treatment Plant, Pipelines, Reservoirs	Ensuring a reliable water supply to the northern part of the lower KwaZulu-Natal south coast during dry periods	SIP 2	Feasibility	650,000
Large water services projects (total project cost of at least R250 million but less than R1 billion over the project life cycle)						
35 Nandoni pipeline	Limpopo	Pipelines	Supply of water to Vhembe district municipality	SIP 6	Handed over	750,000
36 Ndlambe bulk water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme and upgrading existing bulk water scheme	SIP 18	Construction	588,123
37 Sedibeng bulk regional sewerage scheme: Sebokeng and Meyerton wastewater treatment works	Gauteng	Waste Water Services	Upgrading existing wastewater treatment works	SIP 18	Construction	856,000
38 Mbizana regional bulk water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme and upgrading existing bulk water scheme	SIP 6	Construction	910,843

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
39 Westonia/ Randfontein regional bulk wastewater treatment works (Hannes van Niekerk)	Gauteng	Waste Water Services	Upgrading existing wastewater treatment works	SIP 18	Handed over	266,000
40 Westonia/ Randfontein regional bulk wastewater treatment works (Zuurbekom)	Gauteng	Waste Water Services	Construction of new wastewater treatment works	SIP 18	Design	621,520
41 Western highveld regional bulk water supply	Gauteng	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 18	Construction	436,000
42 Greater Mthonjaneni bulk water supply (phases 1 to 3)	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	668,489
43 Ngcebo regional bulk water supply (iLembe)	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	681,986
44 Umshwathi bulk water supply scheme	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Tender	531,847
45 Mooihoek/Tubatse bulk water supply	Limpopo	Bulk Water Supply	Augmentation existing bulk water scheme	SIP 1	Construction	714,000
46 Lebalelo central and north regional water supply	Limpopo	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Feasibility	600,000
47 Nzhelele Valley bulk water supply	Limpopo	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Feasibility	600,000
48 Namakwa bulk water supply	Northern Cape	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 18	Construction	648,312
49 Madibeng bulk water supply	North West	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 4	Construction	800,000

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
50 Taung/ Naledi bulk water supply	North West	Bulk Water Supply	Construction of new bulk water scheme and upgrading of existing bulk water scheme	SIP 4	Construction	839,317
51 Greater Mamusa bulk water supply	North West	Bulk Water Supply	Construction of new bulk water scheme and upgrading of existing bulk water scheme	SIP 4	Construction	444,288
52 Pilanesberg north and south bulk water supply	North West	Bulk Water Supply	Upgrading of existing bulk water scheme and construction of new bulk water scheme.	SIP 4	Construction	755,705
53 Chris Hani district municipality bulk water supply, Ncora cluster 4	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme and upgrading of existing bulk water scheme	SIP 6	Construction	353,144
54 Chris Hani district municipality: Ngcobo cluster 6	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme and spring protection	SIP 6	Construction	321,727
55 Xonxa Dam water supply to Lukhanji	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme to augment existing bulk water scheme	SIP 6	Construction	443,998
56 Amatola Water: Refurbishment of 6 existing plants and downstream infrastructure	Eastern Cape	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 6	Feasibility	500,000
57 Nketoana bulk water supply	Free State	Bulk Water Supply	Construction of new bulk water scheme and upgrading of existing bulk water scheme	SIP 18	Construction	304,000
58 Sterkfontein Dam scheme (phase 1)	Free State	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Construction	330,000
59 Mhlabatshane bulk water supply	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	273,590
60 Greytown regional bulk scheme	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme and upgrading of existing bulk water scheme	SIP 6	Construction	610,603
61 Middelrift regional bulk scheme (phase 2)	KwaZulu-Natal	Bulk Water Supply	Construction of new water treatment works	SIP 6	Construction	340,000

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
62 Sinthumule Kutama bulk water augmentation	Limpopo	Bulk Water Supply	Construction of new bulk water scheme to augment existing bulk water scheme	SIP 6	Construction	488,604
63 Moutse bulk water supply	Limpopo	Bulk Water Supply	Upgrading of existing water treatment works and construction of new bulk water scheme	SIP 6	Construction	720,000
64 Glen Alpine bulk water supply	Limpopo	Bulk Water Supply	Construction of new bulk water scheme	SIP 1	Feasibility	345,000
65 Lephalale/ Eskom: Bulk water augmentation	Limpopo	Bulk Water Supply	Augmentation of existing bulk water scheme	SIP 6	Feasibility	700,000
66 Moretele bulk water supply	North West	Bulk Water Supply	Construction of new bulk water scheme	SIP 4	Construction	451,576
67 Bojanala regional water supply	North West	Bulk Water Supply	Construction of new bulk water scheme to augment existing bulk water scheme	SIP 4	Feasibility	400,000
68 West Coast desalination plant	Western Cape	Bulk Water Supply	Construction of new desalination plant	SIP 18	Design	339,511
69 Empuluzi and Methula bulk water scheme	Mpumalanga	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 18	Feasibility	261,919
70 Khora east bulk water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	369,999
71 Greater Bulwer Donnybrook water scheme	KwaZulu-Natal	Bulk Water Supply	Upgrading of existing water treatment works	SIP 6	Construction	343,337
72 Inyaka wastewater treatment works (phases 3 and 4)	Mpumalanga	Pumps, pipelines	Supply of water	Not related to SIPs	Handed over	407,793
73 Nandoni distribution: Replacement of glass fibre reinforced pipes	Limpopo	Pumps, pipelines	Supply of water	Not related to SIPs	Construction	294,961
74 Hluhluwe (phase 3 and 4)	KwaZulu-Natal	Pumps, pipelines	Supply of water	Not related to SIPs	Construction	412,215
75 Ohrigstad bulk water supply	Limpopo	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 18	Feasibility	450,000

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
76 Inguza Hill bulk water supply	Eastern Cape	Bulk Water Supply				
77 Northern Nzikazi bulk water supply	Mpumalanga	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Design	257,009
78 Makhado West regional bulk water supply	Limpopo	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 18	Feasibility	800,000
79 Kagisano Molopo bulk water supply	North West	Bulk Water Supply	Upgrading of existing water treatment works and new bulk water scheme	SIP 4	Feasibility	350,000
80 Aganang bulk water supply	Limpopo	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 18	Design	350,000
81 Nebo bulk water supply	Limpopo	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Construction	978,400
82 Magalies water supply to Waterberg	Limpopo	Bulk Water Supply	Construction of new bulk water scheme	SIP 1	Feasibility	800,000
83 Mpumalanga Lowveld feasibility studies	Mpumalanga	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Identification	685,000
84 Ngwathe bulk Sewer phase 1 (Vredefort)	Free State	Waste Water Services	Upgrading of existing waste water treatment works	SIP 18	Construction	250,000
85 Dihlabeng bulk water supply (phase 2)	Free State	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Construction	255,000
86 Nongoma bulk water supply	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	529,134
87 Dukuduku resettlement bulk water supply	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	350,000
88 Giyani bulk water supply drought relief	Limpopo	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	500,000
89 Mametya Sekororo bulk water supply	Limpopo	Waste Water Services	Construction of new bulk water scheme	SIP 18	Construction	310,718

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
90 Tokologo regional water supply (phase 2)	Free State	Bulk Water Supply	Upgrading of bulk water scheme	SIP 18	Construction	290,000
91 Ngwathe boreholes	Free State	Bulk Water Supply	Borehole development to augment existing bulk water scheme	SIP 6	Hand over	250,000
92 Driefontein Indaka bulk water supply	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme to augment existing bulk water scheme	SIP 6	Construction	326,318
93 Masilonyana bulk water supply	Free State	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 18	Design	304,941
94 Msukaligwa regional water supply scheme (phase 1)	Mpumalanga	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Design	364,000
95 Emalaheni water treatment works, (refurbishment)	Mpumalanga	Waste Water Services	Upgrading of existing water treatment works and construction of new bulk water scheme	SIP 18	Construction	335,605
96 Balf/Siyat/Grey/ Willem/ Nthor bulk water supply		Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Various	531,638
97 Ratlou local municipality bulk water supply	North West	Waste Water Services	Upgrading existing water treatment works and new bulk water scheme	SIP 4	Feasibility	271,000
98 Mafikeng South bulk water supply	North West	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Design	286,648
99 Mathjabeng bulk sewer (Welkom)	Northern Cape	Waste Water Services	Upgrading of existing water treatment works and construction of new bulk water scheme	SIP 18	Feasibility	300,000
100 Thembisile water scheme (Loskop)	Mpumalanga	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Feasibility	291,985
101 Western Highveld bulk water supply Scheme (Rust de Winter)	Mpumalanga	Bulk Water Supply	Construction of new bulk water scheme	SIP 6 and SIP18	Feasibility	643,000
Small water augmentation projects (total project cost of less than R250 million over the project life cycle)						
102 Bushbuckridge water treatment plant, pipelines and reservoirs	Mpumalanga	Water Treatment Plant, Pipelines, Reservoirs	Supply of water to Bushbuckridge area	Not related to SIPs	Handed over	114,000

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
103 Molopo Eye water treatment plant, pipelines and reservoirs	North West	Water Treatment Plant, Pipelines, Reservoirs	Supply of water to North West	Not related to SIPs	Handed over	39,835
103 Ermelo water treatment plant, pipelines and reservoirs	Mpumalanga	Water Treatment Plant, Pipelines, Reservoirs	Supply of water to Bushbuckridge area	Not related to SIPs	Handed over	47,755
104 Zeerust water treatment plant, pipelines and reservoirs	North West	Water Treatment Plant, Pipelines, Reservoirs	Supply of water to Zeerust area	Not related to SIPs	Handed over	14,204
105 Water services		Supplying water	Supply of water	Not related to SIPs	Construction	-
106 Disestablishment of Botshelo water board	National	Refurbishment of pipelines	Supply of water	Not related to SIPs	Construction	-
107 Abaqulusi, Nongoma and Jozini water intervention projects	KwaZulu-Natal	Refurbishment of pipelines	Supply of water	Not related to SIPs	Construction	-
Small water services projects (total project cost of less than R250 million over the project life cycle)						
108 Graaff-Reinet emergency water supply scheme	Eastern Cape	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 18	Feasibility	54,000
109 Sundays River: Paterson bulk water supply	Eastern Cape	Bulk Water Supply	Upgrading of existing water treatment works and construction of new bulk water scheme	SIP 18	Construction	106,465
110 Steyterville water supply scheme	Eastern Cape	Bulk Water Supply	Augmentation of existing bulk water scheme	SIP 18	Construction	90,494
111 Ibika water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	64,796
112 Ikwezi bulk water supply	Eastern Cape	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 18	Feasibility	50,557
113 Kirkwood water treatment works	Eastern Cape	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 18	Feasibility	20,500

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
114 Chris Hani district municipality bulk water supply: Quthubeni (cluster 9)	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	207,966
115 Misgund bulk water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme and upgrading of existing bulk water scheme	SIP 18	Feasibility	13,640
116 Hofmeyer groundwater supply (phase 1)	Eastern Cape	Bulk Water Supply	Development of borehole to augment existing bulk water scheme	SIP 6	Construction	47,407
117 Middelburg groundwater supply	Eastern Cape	Bulk Water Supply	Development of borehole to augment existing bulk water scheme	SIP 6	Construction	31,105
118 Matatiele bulk water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	182,344
119 Mncwasa bulk water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	125,539
120 Mount Ayliff bulk water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme to augment existing bulk water scheme	SIP 6	Construction	182,343
121 Jagersfontein/ Fauresmith: Bulk water supply (phases 1 to 3)	Free State	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	58,379
122 Mohokare bulk water supply	Free State	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	170,258
123 Tokologo regional water supply (phase 1)	Free State	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Handed over	223,000
124 Setsoto bulk water supply	Free State	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Construction	147,644
125 Dihlabeng bulk water supply (phase 1)	Free State	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Handed over	96,990
126 Phumelela bulk water supply	Free State	Bulk Water Supply	Construction of new bulk water scheme to augment existing bulk water scheme	SIP 18	Construction	166,000
127 Mochaka regional water scheme	Free State	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Construction	90,402

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
128 Mqhaka bulk sewer	Free State	Bulk Water Supply	Construction of bulk sewer	SIP 18	Construction	105,000
129 Ngwathe bulk water supply	Free State	Bulk Water Supply	Upgrading of existing wastewater treatment works	SIP 6	Feasibility	11,300
130 Letsemeng-Petrusburg-Koffiefontein bulk water supply	Free State	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 6	Feasibility	90,000
131 Nala bulk sewer (Wesselsbron/Monyakeng)	Free State	Bulk Water Supply	Construction of bulk sewer	SIP 18	Feasibility	45,999
132 Naledi bulk water supply	Free State	Bulk Water Supply	Upgrading of existing wastewater treatment works	SIP 18	Feasibility	140,000
133 Tswelopele bulk water supply	Free State	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Design	85,000
134 Mantsopa-Tweespruit and Hobhouse bulk water supply	Free State	Bulk Water Supply	Construction of new bulk water scheme to augment existing bulk water scheme	SIP 6	Construction	120,000
135 Sterkfontein Dam scheme: Maluti-a-Phofung bulk water supply (phase 2)	Free State	Bulk Water Supply	Construction of new bulk water scheme	SIP 3	Construction	240,000
136 Extension of Kalahari East pipeline	Northern Cape	Bulk Sewer (Waste Water Treatment Works and Pumps)	Supply of water	SIP 18	Tender	169,369
137 Greater Eston water scheme	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Handed over	192,000
138 Driefontein Complex bulk water supply	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme to augment existing bulk water scheme	SIP 6	Handed over	196,101
139 Emadlangeni bulk regional scheme	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Handed over	50,301
140 Mandlakazi bulk water supply	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme to augment existing bulk water scheme	SIP 6	Construction	94,000
141 Hlabisa regional bulk water supply	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Handed over	166,855

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
142 Port Nolloth bulk water supply	Northern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Design	36,782
143 Colesberg bulk water supply	Northern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Design	123,765
144 Colesberg wastewater treatment works	Northern Cape	Bulk Water Supply	Construction of new waste water treatment works	SIP 18	Handed over	19,446
145 Noupoot bulk water supply	Northern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Construction	51,420
146 De Aar bulk water supply	Northern Cape	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 6	Design	43,735
147 Hopetown water treatment works bulk water supply (Thembelihle)	Northern Cape	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 6	Hand over	75,000
148 Strydenburg groundwater project	Northern Cape	Waste Water Services	Ground water development	SIP 6	Construction	17,662
149 Heuningvlei scheme bulk water supply	Northern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Feasibility	142,340
150 Kuruman bulk water supply	Northern Cape	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 18	Construction	48,350
151 Kathu wastewater treatment works	Northern Cape	Bulk Water Supply	Construction of new waste water treatment works	SIP 18	Handed over	17,584
152 Kathu bulk water supply	Northern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Feasibility	90,000
153 Hantam desalination plant (Brandvlei)	Northern Cape	Bulk Water Supply	Construction of new desalination plant	SIP 18	Feasibility	57,229
154 Loeriesfontein bulk water supply	Northern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Feasibility	40,043
155 Ritchie waste water treatment works bucket eradication programme	Northern Cape	Bulk Water Supply	Construction of bulk water supply line and extension of the treatment works as well as associated infrastructure.	SIP 18	Feasibility	43,000

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
156 Kameelmond Waste Water Treatment Works bucket eradication programme	Northern Cape	Bulk Water Supply	Construction of new wastewater treatment works	SIP 18	Identification	65,000
157 Holpan bulk water supply (Windsorton)	Northern Cape	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 18	Tender	29,216
158 Upgrading of the Homevale wastewater treatment plant (Sol Plaatjie wastewater treatment works)	Northern Cape	Bulk Water Supply	Upgrading of existing waste water treatment works	SIP 18	Construction	78,000
159 Niekerkshoop bulk water supply	Northern Cape	Pumps, pipelines	Supply of water	Not related to SIPs	Handed over	11,098
160 Frankfort bulk sewer (Mafube)	Northern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Construction	131,447
161 Pixley ka Seme bulk water supply	Northern Cape	Bulk Water Supply	Upgrading of existing groundwater water scheme	SIP 18	Feasibility	40,000
162 Marydale bulk water supply	Northern Cape	Bulk Water Supply	Upgrading of existing water treatment works and new bulk water scheme	SIP 18	Feasibility	11,200
163 Upington wastewater treatment works	Northern Cape	Waste Water Services	Construction of a new wastewater treatment works in Upington	SIP 18	Feasibility	15,650
164 Kakamas wastewater treatment works	Northern Cape	Waste Water Services	Construction of new wastewater treatment works	SIP 18	Feasibility	50,000
165 Warrenton water treatment works	Northern Cape	Bulk Water Supply	Upgrading of existing water treatment works and new bulk water scheme	SIP 18	Feasibility	30,629
166 Gariep Dam to Norvaltspond bulk water supply	Northern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Construction	15,087
167 Renosterberg bulk water supply	Northern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Construction	20,700
168 Van Wyksvlei groundwater	Northern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Design	97,644

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
169 Bloemendal water pipeline	Mpumalanga	Bulk Water Supply	Construction of new bulk water pipeline	SIP 18	Handed over	57,481
170 Eerstehoek/ Ekulindeni bulk water supply	Mpumalanga	Bulk Water Supply	Construction of new bulk water supply and upgrading of existing water treatment works	SIP 18	Feasibility	103,611
171 Acornhoek bulk water supply	Mpumalanga	Bulk Water Supply	Augmentation/existing bulk water scheme	SIP 18	Handed over	191,739
172 Sibange water treatment works	Mpumalanga	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Design	97,791
173 Lushuhwane bulk water scheme	Mpumalanga	Waste Water Services	Construction of new bulk water and sanitation schemes	SIP 6	Design	91,918
174 Amsterdam and Sheepmore bulk water scheme	Mpumalanga	Bulk Water Supply	Upgrading of existing water treatment works and new bulk water scheme	SIP 6	Feasibility	30,503
175 Thaba Chweu groundwater development	Mpumalanga	Bulk Water Supply	Ground water development	SIP 6	Construction	8,500
176 Emalaheni bulk water supply (phase 2)	Mpumalanga	Bulk Water Supply	Upgrading existing water treatment works and new bulk water scheme	SIP 18	Feasibility	150,000
177 Hoxane bulk water supply	Mpumalanga	Bulk Water Supply	Upgrading existing water treatment works and new bulk water scheme	SIP 18	Design	89,823
178 Wolmaransstad wastewater treatment works	North West	Bulk Water Supply	Upgrading existing wastewater treatment works	SIP 4	Construction	154,097
197 Potchefstroom water treatment works upgrade	North West	Bulk Water Supply	Upgrading of existing water treatment works and new bulk water scheme	SIP 4	Feasibility	200,000
180 Nahoon Dam (Buffalo City municipality)	Eastern Cape	Waste Water Services	Upgrading existing water treatment works and new bulk water scheme	SIP 4	Feasibility	150,000
181 Ngqamakwe water supply	Eastern Cape	Waste Water Services	Upgrading of existing wastewater treatment works	SIP 4	Feasibility	60,000
182 Citrusdal wastewater treatment works	Western Cape	Bulk Water Supply	Construction of new wastewater treatment works	SIP 4	Construction	35,603
183 Clanwilliam water treatment works	Western Cape	Waste Water Services	Upgrading of existing bulk water scheme	SIP 18	construction	16,000

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
184 Clanwilliam/ Lamberts Bay regional water supply	Western Cape	Bulk Water Supply	Upgrading of existing bulk water scheme	SIP 18	Construction	59,524
185 Tulbagh bulk water supply (Witzenberg)	Western Cape	Waste Water Services	Construction of new bulk water scheme	SIP 18	Construction	73,810
186 Drakenstein wastewater treatment works	Western Cape	Bulk Water Supply	Upgrading existing wastewater treatment works	SIP 18	Handed over	29,000
187 Stellenbosch wastewater treatment works	Western Cape	Bulk Water Supply	Upgrading existing wastewater treatment works	SIP 18	Construction	110,962
188 Worcester bulk water supply	Western Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Construction	66,704
189 Grabouw wastewater treatment works	Western Cape	Waste Water Services	Upgrading of existing wastewater treatment works	SIP 18	Construction	24,102
190 Hermanus bulk water supply	Western Cape	Waste Water Services	Construction of new water treatment works, borehole development and upgrading of existing bulk water scheme	SIP 18	Hand over	20,579
192 Hermanus wastewater treatment works	Western Cape	Bulk Water Supply	Upgrading existing wastewater treatment works	SIP 18	Handed over	31,104
193 Swellendam wastewater treatment works	Western Cape	Waste Water Services	Upgrading of existing wastewater treatment works	SIP 18	Construction	42,908
194 Struisbaai wastewater treatment works	Western Cape	Bulk Water Supply	Upgrading of existing wastewater treatment works	SIP 18	Handed over	11,366
195 Oudtshoorn groundwater supply	Western Cape	Waste Water Services	Ground water development	SIP 18	Feasibility	157,656
196 Beaufort West bulk water supply	Western Cape	Waste Water Services	Upgrading of existing wastewater treatment works and construction of new wastewater treatment works	SIP 18	Feasibility	46,283
197 Vanrhynsdorp raw water supply	Western Cape	Waste Water Services	Augmentation existing bulk water scheme	SIP 18	Design	37,957

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
198 Klawer bulk water supply	Western Cape	Bulk Water Supply	Augmentation of existing bulk water scheme from boreholes	SIP 18	Design	17,661
199 Paarl bulk sewer	Western Cape	Bulk Water Supply	Construction of new bulk sewage conveyance pipelines	SIP 18	Construction	99,956
200 Calitzdorp and Ladysmith wastewater treatment works	Western Cape	Bulk Water Supply	Upgrading existing waste water treatment works	SIP 18	Feasibility	70,650
201 Kannaland Dam relocation	Western Cape	Bulk Water Supply	Augmentation of existing bulk water scheme	SIP 18	Feasibility	72,904
202 Bitou cross border bulk water supply	Western Cape	Waste Water Services	Construction of new bulk sewage conveyance pipelines	SIP 18	Feasibility	120,000
203 Moretele bulk water supply (North)	North West	Bulk Water Supply	Augmentation of existing bulk water scheme	SIP 4	Feasibility	100,000
204 Williston bulk water supply	Northern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Feasibility	47,000
205 Makana bulk water supply (James Kleynhans)	Eastern Cape	Bulk Water Supply	Augmentation of existing bulk water scheme	SIP 18	Design	66,000
206 Ntabankulu bulk water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Feasibility	245,000
207 Capricorn master plan	Limpopo	Bulk Water Supply	Development of master plan	SIP 18	Master plan	3,100
208 Sekhukhune master plan	Limpopo	Bulk Water Supply	Development of master plan	SIP 18	Master plan	3,100
209 Bushbuckridge master plan	Mpumalanga	Bulk Water Supply	Development of master plan	SIP 18	Master plan	3,500
210 Upgrade of Delmas wastewater treatment works	Mpumalanga	Waste Water Services	Upgrading existing wastewater treatment works	SIP 18	Design	68,108
211 Upgrade of Bottling wastewater treatment works	Mpumalanga	Waste Water Services	Upgrading existing wastewater treatment works	SIP 18	Design	51,892

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
212 Balfour wastewater treatment works	Mpumalanga	Waste Water Services	Upgrading existing wastewater treatment works	SIP 18	Tender	76,909
213 Masakoma pipeline		Pumps, pipelines	Supply of water	Not related to SIPs	Handed over	19,045
214 Sterkspruit bulk water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Feasibility	52,000
215 Greater Mpofana regional bulk water supply	KwaZulu-Natal	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Feasibility	248,324
216 Belmont waste water treatment works		Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	142,000
217 Makana bulk sewer	Eastern Cape	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	15,000
218 Mayfield waste water treatment works	Eastern Cape	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	72,473
219 Lady Grey bulk water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Feasibility	128,533
220 Coffee bay water treatment works	Eastern Cape	Water Services	Upgrading existing water treatment works	SIP 18	Feasibility	116,000
221 Kinira regional bulk water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Feasibility	34,500
222 Mount Ayliff bulk peri urban water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Feasibility	187,358
223 Mkemane regional bulk water supply	Eastern Cape	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Feasibility	52,000
224 Hertzogville sewer	Free State	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	1,740
225 Trompsburg bulk sewer	Free State	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	68,700
226 Tweeling sewer pumpstation	Free State	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	7,509
227 Heilbron sewer and pumpstation	Free State	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	6,600

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
228 Rouxville outfall sewer	Free State	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	1,686
229 Memel refurbishment waste water treatment works and sewer	Free State	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	4,990
230 Petrus Steyn refurbishment waste water treatment works	Free State	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	6,000
231 Lindley waste water package plant and works	Free State	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	37,000
232 Ficksburg pump stations	Free State	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	8,000
233 Upgrading of Deneyville waste water treatment works	Free State	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	142,400
234 Masilonyana bulk sewer (Brandfort and Winburg)	Free State	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	70,000
235 Reitz Upgrading waste water treatment plant	Free State	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	55,000
236 Mantsopa bulk sewer (Ladybrand)	Free State	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	30,000
237 Rothdene pump station and raising main	Gauteng	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	37,442
238 Mohlakeng pump station and sewer outfall	Gauteng	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Feasibility	70,000
239 Koster waste water treatment works upgrade	North West	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Design	109,119

Project name	Location	Output	Project description	SIP category	Current project stage	Total project cost in R'000
240 Ventersdorp bulk water supply	North West	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Construction	40,418
241 Nebo bulk water supply -De Hoop Agumentation/ north/south/ steelpoort	Limpopo	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Design	150,192
242 Bushbuckridge water services	Mpumalanga	Bulk Water Supply	Construction of new bulk water scheme	SIP 6	Feasibility	50,000
243 Douglas water treatment works upgrading	Northern Cape	Waste Water Services	Upgrading existing water treatment works	SIP 18	Design	14,750
244 Britstown oxidation ponds	Northern Cape	Waste Water Services	Upgrading existing waste water treatment works	SIP 18	Design	30,600
245 Ermelo bulk water supply (phase 2)	Mpumalanga	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Construction	46,872
246 Carolina Silobela bulk water scheme	Mpumalanga	Bulk Water Supply	Construction of new bulk water scheme	SIP 18	Feasibility	200,000
247 Spioenkop to Ladysmith bulk water supply	KwaZulu-Natal	Bulk Water Supply	Construction of bulk water scheme	SIP 18	Feasibility	350,000

10 Conditional grants

To support the reticulation and on-site solutions in municipalities with low capacity, during the 2016/17 financial year, the Municipal Water Infrastructure (MWIG), the Water Services Operating Subsidy (WSOS) and the Rural Households Infrastructure (RHIG) grants will be merged into a single grant called the Water Services Infrastructure grant.

Table 2: Regional Bulk Infrastructure Grant

Name of grant	Regional Bulk Infrastructure (RBIG)
Purpose	To develop new, refurbish, upgrade and replace ageing infrastructure that connects water resources to infrastructure serving numerous communities over a large area within a municipality; to develop new, refurbish, upgrade and replace ageing wastewater infrastructure or regional significance; to pilot regional water conservation and water demand management projects or facilitate and contribute to the implementation of local water conservation and water demand management projects that will directly impact on bulk infrastructure requirements.
Performance indicator (s)	<ul style="list-style-type: none"> • Number of mega water and wastewater services projects completed • Number of large water and wastewater services projects completed • Number of small water and wastewater services projects completed

Table 3: Water Services Infrastructure Grant

Name of grant	Water Services Infrastructure (WSIG)
Purpose	To facilitate the planning and implementation of various water and sanitation projects to accelerate backlog reduction and improve the sustainability of services in prioritized district municipalities, especially in rural municipalities; provide interim, intermediate water and sanitation services that ensure provision of services to identified and prioritized communities, including spring protection, drilling and testing equipping of boreholes and on-site solutions; to support drought relief projects in affected municipalities.
Performance indicator (s)	<ul style="list-style-type: none"> • Number of small water and wastewater services projects completed • Number of rural households served to eradicate sanitation backlogs as per norms and standards

11 Entities

Various entities report to the Minister through governance arrangements allowing some autonomy to fulfill their mandates and others (as in the WTE) semi-autonomy.

11.1 Trans-Caledon Tunnel Authority (TCTA)

The TCTA was established in 1986 as a state-owned entity specialising in project financing, implementation and liability management. It is responsible for the development of bulk raw water infrastructure and provides an integrated treasury management and financial advisory service to the Department, Water Boards, municipalities and other entities linked to bulk raw water infrastructure. It is listed as a schedule 2 major public entity in the PFMA.

In contribution to the Department's strategic objective of *ensuring the availability of/access to water supply for environmental and socio-economic use*, the TCTA will focus on:

- facilitating water security through the planning, and
- Financing and implementation of bulk raw water infrastructure.

11.2 Water Research Commission (WRC)

The WRC was established in 1971 to generate new knowledge and to promote the country's water research. Its mandate includes promoting co-ordination, co-operation and communication in the area of water research and development; establishing water research needs and priorities; stimulating and funding water research according to priority; promoting effective transfer of information and technology; enhancing knowledge and capacity-building within the water sector. The WRC is listed as a schedule 3A entity in the PFMA.

In contribution to the Department's strategic objective of improving, increasing the skills pool and building competencies within the sector the WRC will focus on

- Promoting co-ordination, co-operation and communication in the area of water research and development.
- Establishing water research needs and priorities.
- Stimulating and fund water research according to priority.
- Promoting effective transfer of information and technology.
- Enhancing knowledge and capacity building in the water sector.
- Developing a strategic framework for water research in South Africa.

11.3 Catchment Management Agencies

Catchment Management Agencies (CMAs) are established in terms of Chapter 7 of the National Water Act. They are responsible for managing the water resources at a catchment level in collaboration with local stakeholders (with a specific focus on involving local communities in the decision making) regarding meeting of basic human needs, promoting equitable access to water and facilitating social and economic development. The CMAs are listed as schedule 3A entities in the PFMA. Nine (9) CMAs corresponding with nine (9) Water Management Areas are being established. The Inkomati-Usuthu and Breede-Gouritz CMAs are operational whilst the Limpopo-North West and the Pongola-Mzimkulu CMAs have been gazetted for establishment. The Vaal and Olifants CMAs will be established during 2015/16 year.

In contribution to the Department's strategic objective of improving the protection of water resources and ensure their sustainability the CMAs will focus on

- Finalisation of the catchment management strategies.
- Registering water use.
- Building Catchment Management Forums
- Facilitating transformation of Irrigation Water Boards
- Supporting verification and validation (V & V) process.
- Dealing with pollution incidents

11.3 Water Boards

Water Boards derive their mandate from the Water Services Act (1997) and are categorised as national government business enterprises in terms of schedule 3B of the Public Finance Management Act (1999). Water Boards are separate legal entities that have their own governance structures and assets and are required to be self-funding. The Minister of Water Affairs appoints board members and chairpersons.

The nine (9) Water Boards provide bulk potable water services to the municipalities in which they operate, and to other water service institutions and major customers within designated service areas. Water Boards vary considerably in size, activities, customer mix, revenue base and capacity. Botshelo Water; Pelladrift Water and Bushbuckridge Water boards were disestablished during 2013/14 and 2014/15 financial years as part of institutional re-alignment and reform process. Both Botshelo Water and Pelladrift Water have been incorporated to the Sedibeng Water while Bushbuckridge Water has been incorporated to Rand Water.

Most of the older and more established Water Boards are located in areas where there are significant urban development nodes (such as Rand Water, Umgeni Water and Magalies Water), while other boards operate in more demographically diversified

areas, where there is an urban and rural mix in the customer base. While providing bulk treated water to municipalities, in some cases the boards also provide retail water and sanitation services on behalf of municipalities.

In support of the Department's strategic objective of ensuring effective performance of water management and services institutions the Water Board will focus on

- Quality potable bulk water supplied to municipalities, industries and mines;
- Infrastructure development and job creation.

Table 4: List of entities to be evaluated during the period

No	Name of entity	Province	Budget in R'000		Date of next evaluation
			Current 2015/16 budget	Projected 2016/17 budget	
	Amatola Water	Eastern Cape	351 307	534 487	April
	Bloem Water	Free State	541 351	634 832	April
	Breede-Gouritz CMA	Western Cape	68.2 m	47.9 m	October
	Inkomati-Usuthu CMA	Mpumalanga	76.8 m	79.6 m	October
	Lepelle Water	Limpopo	591 559	632 409	April
	Magalies Water	North West	486 824	658 504	April
	Mhlathuze Water	KwaZulu-Natal	836 088	1 000 550	April
	Overberg Water	Western Cape	52 965	69 013	April
	Rand Water	Gauteng, Mpumalanga, North West and Free State	11 681 798	13 636 844	April
	Sedibeng Water	Free State, North West and Northern Cape	2 391 132	2 643 636	April
	Trans Caledon Tunnel Authority	National	1 115 476	1 220 651	April
	Umgeni Water	KwaZulu-Natal	3 985 000	4 370 000	November
	Water Research Commission	National	311 334	279 057	November

Their consolidated projected capital expenditure (CAPEX) for the next five years is tabulated below.

Table 5: Entities' consolidated capital expenditure

No	Name of entity	Budget in R' 000					Totals
		2014/15	2015/16	2016/17	2017/18	2018/19	
	Amatola Water	83 756	189 903	92 353	88 807	31 600	486 419
	Bloem Water	88 100	87 100	135 000	138 501	289 000	737 701
	Lepelle Water	92 236	84 170	173 160	212 994	157 740	720 300
	Magalies Water	550 000	929 331	1 653 841	1 112 234	1 257 543	5 502 949
	Mhlathuze Water	137 682	122 826	49 150	186 640	191 250	687 548
	Overberg Water	2 300	8 699	66 547	30 868	6 457	114 871
	Rand Water	2 580 000	3 091 500	4 113 000	4 019 000	3 413 000	17 216 500
	Sedibeng Water	262 000	63 064	74 500	30 868	6 457	436 889
	Trans Caledon Tunnel Authority	1 693 000	1 712 225	1 878 250	631 235	959 822	6 874 532
	Umgeni Water	3 985 000	4 370 000	5 836 000	8 233 000	8 651 000	31 075 000



Appendices



Appendix A: Definition of terms

Term	Definition
Basic Water Supply	The prescribed minimum standard of water supply services necessary for the reliable supply of a sufficient quantity and quality of water to households, including informal households, to support life and personal hygiene (i.e. RDP standard that requires a tap in the street 200m from households)
Bulk water resource infrastructure	Infrastructure required to store and transfer raw water as part of government schemes. It also referred to as national water resources infrastructure (e.g. dams, canals, major pump stations etc.)
Catchment	A watercourse or watercourses or part of a watercourse, means the area from which any rainfall will drain into the watercourse or watercourses or part of a watercourse, through surface flow to a common point or common points
Compulsory licensing	A mechanism to reconsider all the water use authorisations in an area to <ul style="list-style-type: none"> • Achieve a fair allocation of water from a resource that is under stress or to achieve equity in allocation; • Promote beneficial use of water in the public interest; • Facilitate efficient management of the water resource; • Protect water resource quality.
Conservation	In relation to a water resource means the efficient use and saving of water, achieved through measures such as water saving devices, water-efficient processes, water demand management and water rationing
Consumer	any end user who receives water services from a water services institution, including an end user in an informal settlement
Cumulative	A value increase by making successive additions of random variables
Feasibility Plan	An evaluation and analysis of the potential of the proposed water resource development project which is based on extensive investigation and research. This may entail water availability analysis, socio-economic viability, environmental impact assessment and geo-technical studies to provide best suitable option for a water resource development or augmentation.
Interim Water Supply	This can be a spring protection or a borehole with a hand pump in a village
Job opportunity	Paid work created for an individual on a project for any period of time. The same person can be employed on different projects and each period of employment will be counted as a job opportunity.
Large project	A project with a total cost of at least R250 million but less than a R 1 billion over the project life cycle.
Mega project	A project over R400 million per annum for a minimum of three years, or a minimum of R1 billion total project cost.
National Water Resource Strategy	Provides the framework for the protection, use, development, conservation, management and control of water resources for the country as a whole. It also provides the framework within which water will be managed at regional or catchment level, in defined water management areas.
Non-cumulative	Values calculated during the query at a certain period (i.e. actual values during the quarter)
Pollution	The direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it less fit for any beneficial purpose for which it may reasonably be expected to be used; or harmful or potentially harmful to the welfare, health or safety of human beings; to any aquatic or non-aquatic organisms; to the resource quality; or to property
Programme	Is the main division within the department's budget that funds a clearly defined set of objectives based on the services or functions within the department's legislative and other mandates
Reserve	The quantity and quality of water required to satisfy basic human needs by securing a basic water supply, as prescribed under the Water Services Act, 1997 (Act No. 108 of 1997), for people who are now or who will, in the reasonably near future, be relying upon; taking water from; or being supplied from the relevant water resource; and to protect aquatic ecosystems in order to secure ecologically sustainable development and use of the relevant water resource;

Term	Definition
Resource Poor Farmer	Farmers who are citizens of South Africa and who are members of the historically disadvantaged population groups.
Resource quality	The quality of all the aspects of a water resource including the quantity, pattern, timing, water level and assurance of in-stream flow; the water quality, including the physical, chemical and biological characteristics of the water; the character and condition of the in-stream and riparian habitat; and the characteristics, condition and distribution of the aquatic biota
Resource Quality Objective	The establishment of clear goals relating to the quality of the relevant water resource. In determining resource quality objectives a balance must be sought between the need to protect and sustain water resources on the one hand, and the need to develop and use them on the other.
SIP 1	Unlocking the northern mineral belt with Waterberg as Catalyst
SIP 2	Durban-Free State Gauteng Logistics and Industrial Corridor
SIP 3	South eastern node and corridor development
SIP 4	Unlocking the economic opportunities in the Both West Province
SIP 5	Saldanha-Northern Cape Development Corridor
SIP 6	Integrated municipal infrastructure project
SIP 11	Agri-logistics and rural infrastructure
SIP 18	Water and sanitation master plan
Small project	A project with a total cost less than R250 million over the project life cycle
Sub-programme	Is a constituent part of a programme that defines the services or activities which contribute to the achievement of the objective(s) of the programme of which it forms a part.
Water Management Area	Is an area established as a management unit in the national water resource strategy within which a Catchment Management Agency will conduct the protection, use, development, conservation, management and control of water resources
Water Management System	This is a computer system designed to support the water resource management function of the Department with emphasis on water and environmental quality
Water Reconciliation Strategy	A study that identifies, evaluate and prioritises interventions to reconcile the future water requirements with the available water resources within a particular area
Water resource	Includes a watercourse, surface water, estuary, or aquifer
Water Service Authority	Any municipality, including a district or rural council as defined in the Local Government Transition Act, 1993 (Act No. 209 of 1993). responsible for ensuring access to water services:
Water Services	Water supply services and sanitation services
Water use authorisation	Water use authorisation may be one of the following: <ol style="list-style-type: none"> 1) Schedule 1 use - small volumes of water for household use only. No application for a licence needs to be made. 2) General Authorisations - larger volumes of water may be generally authorised for a specific type of water use or category of water user. These users need to register their use but do not need a licence. 3) Existing Lawful Use – this allows water use that was lawfully used before the NWA came into effect to continue until it can be converted into a licence using compulsory licensing. 4) Licensed Water Use – Licences are issued under the NWA, and require approval of an application by the Department of Water and Sanitation.

Appendix B: Descriptions for strategic objectives

Strategic objective 1.1: Water resources protected through water supply and sanitation services regulation, compliance monitoring and enforcement

Strategic objective title	Water resources protected through water supply and sanitation services regulation, compliance monitoring and enforcement
Short definition	To protect water resources by monitoring and evaluating the level of regulatory compliance and instituting enforcement actions.
Purpose/importance	One of the department's core mandate is to monitor the overall level of regulatory compliance relating to water resource management and water and sanitation services using the approved regulatory performance assessment tool.
Source/collection of data	The various regulatory performance assessment tools (e.g. Blue Drop, Green Drop, water use authorization and dam safety databases) will be used as data source.
Method of calculation	This will be the actual water and sanitation services regulatory compliance and assessment tool measuring the level of regulatory compliance across the water value chain.
Data limitations	Data completeness within the regulatory databases
Type of indicator	Outcome.
Calculation type	Non-cumulative
Reporting cycle	Annual
New indicator	Yes
Desired performance	Develop the proposed water and sanitation services regulatory compliance and assessment tool by 2016/17
Indicator responsibility	DDG: Water Sector Regulation

Strategic objective 1.2: Enhanced management of water and sanitation information

Strategic objective title	Enhanced management of water and sanitation information
Short definition	An enhanced state of water report through an optimal integrated national monitoring system based on reliable water monitoring information
Purpose/importance	One of the department's core mandate is to develop and maintain an integrated national water monitoring system with reliable water monitoring information to ensure the accuracy of the state of water report.
Source/collection of data	Water resources databases, water quality databases will be used as data sources
Method of calculation	This will be the actual integrated national water monitoring system.
Data limitations	Data completeness within databases
Type of indicator	Outcome
Calculation type	Non-cumulative
Reporting cycle	Annual
New indicator	No
Desired performance	Finalise the integrated National Water Resources Monitoring strategy by 2016/17
Indicator responsibility	DDG: Water Planning and Information Management

Strategic objective 1.3: The integrity of fresh water ecosystems protected

Strategic objective title	The integrity of fresh water ecosystems protected
Short definition	This is the classification and determining of resource quality objectives for targeted river systems in order to determine their ecological health.
Purpose/importance	One of the department's core mandate is to determine resource quality objectives for river systems.
Source/collection of data	Water resource databases, on-site investigations and stakeholder inputs
Method of calculation	This will be the actual river systems with determined resource quality objectives
Data limitations	None
Type of indicator	Output
Calculation type	Cumulative
Reporting cycle	Annually
New indicator	No
Desired performance	Classification of 17 river systems and resource quality objectives determined for each by 2020.
Indicator responsibility	DDG: Water Planning and Information Management

Strategic objective 1.4: Enhanced water use efficiency and management of water quality

Strategic objective title	Enhanced water use efficiency and management of water quality
Short definition	This is the assessment of water losses in eight (8) large water supply systems to inform policy decisions and recommend interventions that improve the water loss situations.
Purpose/importance	Water conservation and demand management is a key component to the sustainable management of South Africa's scarce water resources and is a key strategic intervention to reconcile water requirements with water availability.
Source/collection of data	WCWDM strategies and business plans, previous research; water data and information which will be utilised to gather information
Method of calculation	This will be the existence of the Assessment Reports for the following 8 large water supply systems: <ol style="list-style-type: none"> 1) The Vaal River System 2) The Crocodile (West) River System 3) The KwaZulu-Natal Coastal Metropolitan Water Supply System 4) The Western Cape Water Supply System 5) The Algoa Water Supply System 6) The Amatole Bulk Water Supply System 7) The Greater Bloemfontein Water Supply System 8) The Olifants River Water Supply System
Data limitations	None existence of documentation
Type of indicator	Output
Calculation type	Non-cumulative
Reporting cycle	Annually
New indicator	Yes
Desired performance	Annually monitor 8 large water supply systems for water losses
Indicator responsibility	DDG: Water Planning and Information Management

Strategic objective 1.5: Freshwater eco-systems protected from Acid Mine Drainage

Strategic objective title	Freshwater eco-systems protected from Acid Mine Drainage (AMD)
Short definition	This is the monitoring or an assessment of the implementation of a National Acid Mine Drainage Programme.
Purpose/importance	The ecological damage caused by acid mine drainage through the contamination of freshwater water systems requires that a national AMD programme is developed and implemented to address the problem.
Source/collection of data	Site inspections conducted by the regional offices or catchment management agencies within a catchment area
Method of calculation	This will be the actual end of term analysis on the implementation of the National Mine water regulation Programme
Data limitations	Non- existence of project plans, reports, site inspections and various other supporting documents.
Type of indicator	Outcome - effectiveness
Calculation type	Cumulative
Reporting cycle	Annual
New indicator	Yes
Desired performance	Annual analysis and resulting report on progress against the Long term National Acid Mine Drainage Programme, tabled to Top Management Committee and culminating in a 5-year end of term analysis and resulting report.
Indicator responsibility	Chief Director: Mine Water Management

Strategic objective 2.1: A coordinated approach to water and sanitation infrastructure planning and monitoring and evaluation

Strategic objective title	A coordinated approach to water and sanitation infrastructure planning and monitoring and evaluation
Short definition	This is the development a maintenance of an up-to-date National Water and Sanitation Master Plan with a 10 year horizon.
Purpose/importance	The NDP and MTSF require the development of a master plan that will provide a coordinated approach to water and sanitation infrastructure planning, monitoring and evaluation.
Source/collection of data	National Water Resource infrastructure strategy, Water and Sanitation Service Delivery implementation plans
Method of calculation	Document verification – the existence of a completed NDP and MTSF aligned Sector Infrastructure Master Plan by June 2017
Data limitations	None
Type of indicator	Output
Calculation type	Non-cumulative
Reporting cycle	Annually
New indicator	Yes
Desired performance	An up-to-date National Water and Sanitation Master Plan (NWSMP) with a 10 year horizon
Indicator responsibility	DDG: Water Planning and Information Management

Strategic objective 2.2: Targeted and aligned planning for adequate water availability and the enhanced provision of water supply and sanitation services

Strategic objective title	Targeted and aligned planning for adequate water availability and the enhanced provision of water supply and sanitation services
Short definition	Completion of plans for the water supply and water and sanitation services infrastructure projects towards the provision of sustainable and reliable services.
Purpose/importance	The completion of plans supports the development of bulk water supply and water and sanitation services infrastructure projects.
Source/collection of data	Existence of Record of Implementation Decisions (RID) and Implementation Readiness Studies (IRS) as evidence that the planning process have been completed
Method of calculation	This will be the number of plans for bulk water and water and waste water services completed.
Data limitations	None
Type of indicator	Output
Calculation type	Cumulative
Reporting cycle	Annually
New indicator	Yes (reframed)
Desired performance	Completed plans for 86 bulk water supply and sanitation services infrastructure projects
Indicator responsibility	DDG: Water Planning and Information Management

Strategic objective 2.3: Adequate water availability and enhanced provision of sustainable and reliable water supply and sanitation services

Strategic objective title	Adequate water availability and enhanced provision of sustainable and reliable water supply and sanitation services
Short definition	Ensure adequate water availability and enhanced provision of sustainable services by completing water and waste water services infrastructure projects implemented through the development of bulk raw water infrastructure, regional bulk, municipal water and accelerated community infrastructure programmes.
Purpose/importance	The NDP and MTSF require a 5% increase in additional bulk water resources by 2019 and a 90% access to functional water and sanitation service by 2019
Source/collection of data	A list of bulk water supply and water and waste water services infrastructure projects under construction will be the data source
Method of calculation	This will be the actual number of completed bulk water supply and water and waste water services infrastructure projects
Data limitations	None
Type of indicator	Output
Calculation type	Cumulative
Reporting cycle	Annually
New indicator	Amended
Desired performance	Complete over 600 bulk water supply and sanitation services infrastructure projects
Indicator responsibility	DDG: Water Infrastructure Development

Strategic objective 2.4: Safe, reliable and sustainable water supply and water and sanitation services infrastructure

Strategic objective title	Safe, reliable and sustainable water supply and water and sanitation services infrastructure
Short definition	This is the effective rehabilitation, maintenance and management of water and sanitation infrastructure assets in accordance with the approved National Asset Management Plan
Purpose/importance	The NDP and MTSF require a 90% access to functional water and sanitation service by 2019. Unplanned or unscheduled maintenance needs will arise as a result of numerous factors beyond the department's control. However, its proportion against the planned maintenance projects defined in the AMP should decrease over time as the benefits of consistent planned maintenance are realised.
Source/collection of data	An approved National Asset Management Plan (NWRI)
Method of calculation	Document verification - An approved National Asset Management Plan (NWRI); and annual reports on analyses against the approved National Asset Management Plan (NWRI).
Data limitations	None
Type of indicator	Output
Calculation type	Non-cumulative
Reporting cycle	Annually
New indicator	Yes (reframed)
Desired performance	Annual assessments on the implementation of the National Asset Management Plan (NAMP)
Indicator responsibility	DDG: Water Infrastructure Development

Strategic objective 2.5: Enhanced provision of sustainable and dignified basic sanitation

Strategic objective title	Enhanced provision of sustainable and dignified basic sanitation
Short definition	This is the eradication of sanitation backlog in rural households and replacing of bucket sanitation in formal settlements to ensure that they have adequate sanitation services that is easily accessible to household members, has the necessary operational support for the safe removal of human waste and black and/or grey water from the premises where this is appropriate and necessary, and promotes the communication of good sanitation, hygiene and related practices.
Purpose/importance	The NDP and MTSF require sustainable and reliable access to basic services, particularly in weaker municipalities which have the highest unmet demand for basic services
Source/collection of data	The list of municipalities with existing bucket sanitation systems and list of households served through the rural household infrastructure
Method of calculation	This will be the number of households supported within the period
Data limitations	Data accuracy
Type of indicator	Outcome
Calculation type	Cumulative
Reporting cycle	Quarterly
New indicator	No
Desired performance	Eradicate the sanitation backlog in over 26 000 rural households and replacing bucket sanitation systems in formal settlements in over 4 000 households
Indicator responsibility	Chief Director: National Sanitation Service

Strategic objective 3.1: Equitable water allocation and availability for socio-economic development

Strategic objective title	Equitable water allocation and availability for socio-economic development
Short definition	This is validation and verification of water allocations and implement the revised allocations therein.
Purpose/importance	The revised water allocations are aimed at supporting inclusive socio-economic development and supports water allocations to new users seeking access but current users already take more than can reliably be provided.
Source/collection of data	Verification and validation reports; water allocation review reports; water allocation implementation reports; revised water allocations implementation plans.
Method of calculation	Document verification of the review of water allocations in each catchment area, the implementation of the revised allocations as per annually developed implementation plan.
Data limitations	Highly reliant on the availability of data from the project to validate and verify water users within catchment areas.
Type of indicator	Outcome - effectiveness
Calculation type	Cumulative
Reporting cycle	Annual
New indicator	Yes
Desired performance	Implementing the revised water allocations within 9 catchments
Indicator responsibility	DDG: Water Sector Regulation

Strategic objective 3.2: Equitable water allocation and availability for socio-economic development

Strategic objective title	Targeted rural development initiatives that support smallholder farmers
Short definition	Implementing defined and targeted rural development initiatives to support smallholder farmers through the resource poor farmer and water harvesting programmes.
Purpose/importance	This supports targeted rural development initiatives aimed at especially the emerging black farmers by addressing water related and food insecurity challenges
Source/collection of data	Lists of beneficiaries will be maintained
Method of calculation	Document verification - Evidence of the implementation of the two targeted rural development initiatives to support smallholder farmers.
Data limitations	None
Type of indicator	Output
Calculation type	Non-cumulative
Reporting cycle	Annually
New indicator	No
Desired performance	2 targeted rural development initiatives to support smallholder farmers implemented per annum. (Water Harvesting and financial support to resource poor farmers programmes).
Indicator responsibility	Chief Director: Operational Support

Strategic objective 3.3: Targeted procurement that supports Black Entrepreneurs in the sector

Strategic objective title	Targeted procurement that supports Black Entrepreneurs in the sector
Short definition	This measures the extent in which the department empowers qualifying small ,medium and micro enterprises through the procurement of goods and services in line with the department BBBEE policy.
Purpose/importance	Section 13G(1) of the BBBEE Amendment Act requires government departments to report on their compliance with BBBEE. The departmental policy focuses on procuring goods and services from qualifying small enterprises to support their empowerment
Source/collection of data	Supply chain database
Method of calculation	If the total procurement from SMMEs is given the value “x” and the total procurement budget is given the value “y” the formula is as follows: $y\% = \frac{x}{y} \times 100$
Data limitations	Incorrectly categorised/segregated data in SCM system
Type of indicator	Output
Calculation type	Non-cumulative
Reporting cycle	Annually
New indicator	Yes
Desired performance	Spend 80% of the procurement budget on BBBEE compliant suppliers
Indicator responsibility	Chief Financial Officers

Strategic objective 3.4: Expanded economic opportunities for historically excluded and vulnerable groups

Strategic objective title	Expanded economic opportunities for historically excluded and vulnerable groups
Short definition	This monitors the number of direct job opportunities created through implementing water augmentation, water services and dam safety rehabilitation project over the given period.
Purpose/importance	Outcome 4 on “Decent employment through inclusive growth” requires that the infrastructure built programmes contribute to the creation of work opportunities to provide short term relief for the unemployed.
Source/collection of data	A list of all created job opportunities is maintained.
Method of calculation	This will be the actual number of job opportunities created. The targeting formula is as follows: $\text{Direct job opportunities} = \frac{(30\% \text{ of construction budget} - \text{material budget})}{40\,000}$
Data limitations	None
Type of indicator	Outcome
Calculation type	Cumulative
Reporting cycle	Annually
New indicator	Amended
Desired performance	Increased number of job opportunities created through augmentation, dam safety rehabilitation and regional bulk infrastructure projects
Indicator responsibility	DDG: Water Infrastructure Development

Strategic objective 4.1: An enabling environment for the management of water resources and the provision of basic water and sanitation services across the sector

Strategic objective title	An enabling environment for the management of water resources and the provision of basic water and sanitation services across the sector
Short definition	This strategic objective indicator monitors the process of developing and implementing the National Water and Sanitation Amendment Act, to integrate the sanitation function that was transferred as per the presidential proclamation 43 of 2014.
Purpose/importance	The Water and Sanitation Amendment Act will consolidate the National Water Act, Water Services Act and the relevant draft sanitation legislation. This legislation will govern the entire water value chain, covering water supply and sanitation services, as well as water resources infrastructure and aims to enhance cooperative governance with clear institutional roles and responsibilities and commonly agreed targets for water and sanitation delivery.
Source/collection of data	Information will be sourced from the existing legislation and from workshops with the various stakeholders
Method of calculation	This will be the actual National Water and Sanitation Amendment Act
Data limitations	None
Type of indicator	Process
Calculation type	Cumulative
Reporting cycle	Annual
New indicator	Amended
Desired performance	Water and Sanitation Amendment Bill developed
Indicator responsibility	DDG: Water Sector Regulation

Strategic objective 4.2: Sound governance and oversight of the DWS public entities

Strategic objective title	Sound governance and oversight of the DWS Public Entities
Short definition	Sound governance and oversight of the sector by conducting performance evaluations of DWS Public Entities against the strategic intent reflected in their shareholder compacts.
Purpose/importance	To assert the role of the DWS as the sector-leader; to ensure the strategic and policy alignment of the DWS Public Entities with that of government and the department; and to oversee sound governance, accountability and performance of the entities.
Source/collection of data	Signed shareholder compacts; business plans, performance reports and annual reports of Entities (Water Boards, CMA's, TCTA, WRC)
Method of calculation	Document verification – existence of a consolidated end of term analysis report covering all the Water Boards, CMA's, TCTA and WRC, with the following minimum deliverables: <ul style="list-style-type: none"> • Extent to which the Public Entities have aligned their strategic plans and business plans to that of the Department, and the legal and policy operating environment. • Analysis of actual achievements against commitments as outlined in the Shareholder Compacts. • Key findings, conclusions and remedial strategies.
Data limitations	None
Type of indicator	Output
Calculation type	Non-cumulative
Reporting cycle	Annually
New indicator	Yes
Desired performance	Performance evaluation of the DWS entities against their performance agreement
Indicator responsibility	DDG: Water Sector Regulation

Strategic objective 4.3: An efficient, effective and high performing organisation

Strategic objective title	An efficient, effective and high performing organisation
Short definition	This is the monitoring of the department's process of being an efficient and effective organization by attaining and unqualified audit for both financial and non-financial data
Purpose/importance	In support of MTSF 12: An efficient, effective and development oriented public service this strategic objective indicator seeks to ensure good governance and a sound internal control environment whilst also achieving high performance as measured by audit opinion of the AG on both the financial management and predetermined objectives of the Department and all its operating units
Source/collection of data	Annual Audit Report from the Auditor General for the previous financial year.
Method of calculation	Document verification: Audit opinion of the Auditor General for the Main Account and WTE, both financial and non-financial.
Data limitations	None
Type of indicator	Output
Calculation type	Non-cumulative
Reporting cycle	Annually
New indicator	Yes
Desired performance	An unqualified audit outcome on the financial and non-financial data from 2016/17 onwards
Indicator responsibility	Chief Financial Officers: Main Account and Trading Entity as well as DDG: PMU

Strategic objective 4.4: Coordinated development of the skills pool across the sector

Strategic objective title	Coordinated development of the skills pool across the sector
Short definition	Development and implementation of a water and sanitation services sanitation sector occupations framework that will coordinate skills planning, funding, monitoring mechanism, skills and capacity programmes
Purpose/importance	To develop water and sanitation skills development system that support workplace skills planning, that is based on structured and existing occupations; and linked to National Skills Development Framework.
Source/collection of data	Water and sanitation services sanitation sector occupations framework
Method of calculation	Document verification – Existence of a water and sanitation services sanitation sector occupations framework
Data limitations	None
Type of indicator	Output
Calculation type	Non-cumulative
Reporting cycle	Annually
New indicator	Yes
Desired performance	Standardise the workplace skills plan for the water sector by 2018/19 and annually monitoring progress from 2019/20 onwards.
Indicator responsibility	Chief Director: Operational Support

Strategic objective 5.1: Targeted and sustained African and Global cooperation in support of the national water and sanitation agenda

Strategic objective title	Targeted and sustained African and Global cooperation in support of the national water and sanitation agenda
Short definition	Development of an approved 5-year strategically aligned Africa and Global International Relations Programme and to analyse progress in achieving its outcomes.
Purpose/importance	Outcome 11 on the “Creating a better South Africa, a better Africa and a better world” requires government departments to support the management of international relations and South African foreign policy by developing an international relations programme aligned to the DIRCO priorities.
Source/collection of data	DIRCO Africa and Global priorities
Method of calculation	Document verification: The existence of an approved 5-year International Relations Programme, revised at least annually. End of term analysis and resulting report on the implementation of the International Relations Programme against the outcomes of the approved programme,
Data limitations	None
Type of indicator	Outcome - Effectiveness
Calculation type	Cumulative
Reporting cycle	Annual
New indicator	Yes
Desired performance	An approved Africa and global international relations programme and a 5 year end of term analysis on its implementation
Indicator responsibility	DDG: International Water Cooperation

Strategic objective 5.2: Informed and empowered communities and responsive government securing integrated and sustainable partnerships to support the water and sanitation development agenda

Strategic objective title	Informed and empowered communities and responsive government securing integrated and sustainable partnerships to support the water and sanitation development agenda
Short definition	A strategically aligned partnerships, communications and stakeholder relations Programme for the medium term and assessment of progress in achieving the outcomes of the Programme.
Purpose/importance	To support the core business of the Department by securing partnerships with private and social partners to further the water and sanitation development agenda. To communicate successes, programmes and interventions to address challenges. To provide platforms for communities to participate in key decisions and to voice their concerns and actively contribute to their improvement, in partnership with government and other key stakeholders.
Source/collection of data	Communications interventions, media briefings, conferences, statements, branding and awareness campaigns and stakeholder intervention reports.
Method of calculation	Document verification: The existence of an approved 5-year strategically aligned Partnerships, Communications and Stakeholder Relations Programme. End of term assessment report on the implementation of the Partnerships Communications and Stakeholder Programme against the outcomes
Data limitations	None
Type of indicator	Outcome - Effectiveness
Calculation type	Cumulative
Reporting cycle	Annual
New indicator	Yes
Desired performance	5-year strategically aligned programme on Partnerships, Communications and Stakeholder Relations; approved at the start of the MTSF and assessed at the end of term
Indicator responsibility	DDG: Communications and IGR