water affairs
Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

Strategic Plan

for the fiscal years

2013/14 to 2017/18

Tabled: 13 March 2013

Ministerõs statement

The Strategic Plan affords us the opportunity, as the leader of the water sector, to map out our contributions in fulfilling the governmentõs priorities. These in the main are strategies and outcomes aimed at washing away the triple challenges of poverty, unemployment and inequality confronting our country. It is instructive to note that our Strategic Plan for 2013/14 to 2017/18 financial years is anchored on and aligned with the Government priorities for the 2009/10 to 2014/15.

The innovative process of placing the Department on a new trajectory of improved performance includes the appointment of the Business Process Re-Engineering Committee (BPRC) which commenced functioning within the Department. The process re-aligning the water entities that fall within the ambit of the department remains a key priority and is being addressed accordingly. The re-organisation of the structure of the Department to facilitate optimal water service delivery, exemplary leadership of the water sector, excellent stewardship of resources to ensure its translation into clean audits and improved performance are critical areas that form part of the deliverables of BPRC. This team of specialists are assisting the Department in this regard and it is gratifying to note that for purposes of expediency and enhanced service delivery the recommendations of the team is being implemented as the process unfolds.

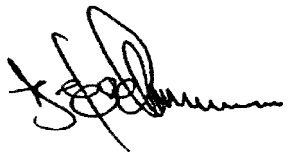
On the water service delivery front, it is pleasing to observe that Statistics South Africa (StatsSA) records confirm that we have improved immensely on the figure of 59 per cent, in providing access to clean and safe drinking water in the country in 1994 to 94.8 per cent currently. The remaining backlog of 5.3 per cent compels us to work tirelessly in crafting innovative and creative ways of providing water to un-served areas and communities. The Interim Water Supply Strategy that has been especially designed to fill this gap warrants our dedicated effort in 2013 and having met the Millennium Development Goals (MDGs) we are determined to meet our own target of universal access to water.

We are gearing ourselves to pursue our policy and legislative review programme with renewed vigour during the Cabinet and Parliamentary programmes of 2013 in pursuit of realising our objectives. The Water Infrastructure Investment Framework (WIIF) as approved by Cabinet in 2012 requires of us further elaboration and detail to enable a comprehensive investment framework for water infrastructure, from a national, bulk and reticulation perspective. The White Paper on Water Policy that was developed in 1997 also needs to be revised and this process has already been set in motion. In addition, a few urgent amendments will have to be made to the National Water Act which includes matters in relation to the Water Tribunal.

To ensure that we have water security for basic services, growth including development, it is critical that sufficient funding is made available and that the tariffs to be levied for new water projects are both affordable as well as sufficient for capital redemption, operation and maintenance. It is of paramount importance that we should revise the funding models with the optimum balance between private and government funding, as well as the tariff policy for water projects in partnership with National Treasury.

Our law reform programme during this period would cover amendments to the National Water Act, the National Water Research Amendment Bill and the Water Services Act. This

gesture will lend support to accelerate equity, thus enhancing the transformation of our water landscape to bolster our hard won freedom by creating a conducive environment for economic, social and related development in our motherland. It is interesting and exciting to observe that the United Nations has declared 2013 as the Year of Water Cooperation. We should be inspired to harness measures to ensure water sustainability, adopt climate change resilient best practices and leverage the global profile of water to achieve a better life for our communities, beloved country, region, continent and the world as a whole.



Mrs B E E Molewa

Minister of Water and Environmental Affairs

Message from the Deputy Minister

South Africa is a water-scarce country and we need to ensure that the water is conserved to meet all our development plans. We are faced with a challenge of water loss through leaks from households and public places to name but a few, pollution of our rivers, and people without water amongst others, hence our commitment to prioritise water conservation and support to local government.

The Department of Water Affairs will intensify water conservation programmes and promote community-based water resource management approach as our communities possess a wealth of indigenous knowledge that can be useful in changing the status quo. We will ensure that we continue to educate our communities about water conservation to be water ambassadors who will guard against the prevailing non compliance to legislation by reporting these as water sources are closer to them.

We will focus on the following programmes as a response to the above mentioned challenges:

- Adopt a River project aimed at addressing pollution in the rivers whilst empowering women through job creation and skills development;
- 2020 Vision Programme aimed at educating schools about water conservation and promotion of water sector careers.
- Awards aimed at recognising institutions that implemented water conservation initiatives such as agriculture, industry, mining, municipalities, schools, communities, women groups.
- Addressing transformation issues in the water sector.
- Local government support and Interim Water Supply project to ensure that basic water supply is provided to communities without water. This programme will include dealing with water use efficiency programmes at a community level as well as water leaks at municipal and household levels

We will do our best to achieve sustainable water resource management.

Mrs R T Mabudafhasi

Deputy Minister of Water and Environmental Affairs

Overview of the Accounting Officer

The National Treasury directs us to table a five year strategic plan that needs to be aligned with our budget for the year. It has as its major objective the intention to strengthen the relationship between our strategic goals and performance as an organization.

It is equally poignant to note that our Strategic Plan is synchronized with our Annual Performance Plan (APP) and cascaded to individual Performance Agreements of staff. The successful execution thereof is the requisite for improved performance of the Department.

Given the changes and recent trends in the service delivery environment, the Department has also undertaken a review of the previous Strategic Plan thus refocusing objectives and new commitments to respond to the new environment.

Positioning water as a catalyst for development

This plan is designed in such a way as to emphasize the point about the centrality of water in the economy. As reflected in the New Growth Path, water runs through various sectors as an enabler and bedrock for all future planning and development. All the indicators and performance targets in this plan contribute in one way or another to this variety of sectors like energy, mining, agriculture and social development. The success or failure to achieve these objectives will have a huge impact not only in the water sector but the entire value chain in the economy.

Water governance as a condition for sustained water delivery

One of the main commitments in this Strategic Plan is the finalization of the second National Water Resource Strategy (NWRS-2). This strategy forms the cornerstone of water resources management in the country and gives guidance on what future priorities are in the business of water in South Africa. This plan will see the final adoption and implementation of this strategy by all sectors along with all the technical and support strategies contained therein.

In the same context, the institutional framework to improve water resource management is geared towards finalization. The plan commits to the establishment of nine catchment management areas within three years, formalise the nine regional entities to provide regional bulk infrastructure and to support municipalities on bulk water provision.

The need for sector skills development

The water sector has ambitious plans and strategies that seek to guarantee water security for the future. These plans are detailed in the second National Water Resource Strategy (NWRS-2) to be finalized in this financial year, in the reconciliation studies undertaken for large systems and small town studies also undertaken to determine future water demand and supply options. All these grand plans, if implemented as recommended in these various studies will ensure that South Africa does not run out of water as many have predicted.

The sad reality is that the sector is losing its most critical resource, which is its human capital. These strategies need the technical expertise to be realized and most of these are either aging in the system or retired.

Sound financial management and accountability

The Department emerges from a difficult period of poor audit outcomes from the office of the Auditor General which calls for a new way of doing things from a financial management point of view. Though not ideal yet, the last few years have seen the Department improving on its financial management and reporting as to receive a qualified audit with less matters of emphasis.

The Department has a specific target to achieve a clean audit in 2014 and for this a number of actions and undertakings have been prescribed. The achievement of these objectives in the 2013/14 financial year as outlined in this plan will help put the Department on a new accountability pedestal.

Addressing equity and increasing access to water

The recent census results, which underscore our own statistics on issues of access to water, confirm that a lot of progress has been made to deliver water to the people. The 94.8 per cent access achievement is a welcome development in a democratic state but does not remove the reality that many communities; especially in rural areas still lack access to water. This Strategic Plan sets out our intention of increasing access to these vulnerable communities as well. Programmes such as rain water harvesting and new initiatives to increase access to those who never had water in the first place are all measures detailed in this current plan.

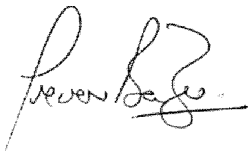
In addition, is the critical issue of equity in allocation which is addressed extensively in the second National Water Resource Strategy (NWRS-2). Programmes like resource poor farmers and targeted initiatives to address the historic imbalance are also detailed in the current plan.

Contributing to the infrastructure build programme

South Africa has unveiled a massive infrastructure programme to build the economy and create jobs. The role of water in this programme is very significant as most projects require a secure source of water availability in the best quality we can provide. The water sector itself has its own infrastructure investment plan which has been quantified to cost over R660 billion over the next ten years. The Strategic Plan identifies infrastructure investment programmes to be undertaken over the next ten years. The success of these projects will guarantee the success of the rest of other sectors who rely on water for survival.

Conclusion

The Department of Water Affairs is committed to achieving the objectives as outlined in this plan. Such commitment is derived from our appreciation of our mandate as prescribed in the constitution and the national water act.



Director-General (Acting)

Trevor Ian Balzer

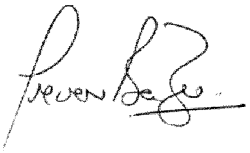
Official sign off

This Strategic Plan was developed by the management of the Department of Water Affairs and takes into account all the relevant policies, legislation and other mandates for which the Department is responsible. It accurately reflects the strategic outcome oriented goals and objectives which the Department will endeavour to achieve over the period.

Ms O N V Fundakubi
Chief Financial Officer: Main Account Signature

Ms Z Mathe
Acting Head: Water Trading Entity

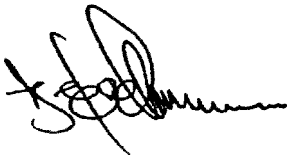
Signature



Mr T I Balzer
Director-General(Acting) Signature

Mrs R T Mabudafhasi
Deputy Minister of Water and Environmental Affairs Signature

Approved by



Mrs B E E Molewa
Minister of Water and Environmental Affairs Signature

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LIST OF ABBREVIATIONS AND ACRONYMS

Abbreviation / acronym	Description
ADM	Amathole District Municipality
AMCOW	African MinistersôCouncil on Water
AU	African Union
BCMM	Buffalo City Metropolitan Municipality
BPT	Balancing pressure tank
CMA	Catchment Management Agency
DG	Director-General
dia	Diameter
DM	District Municipality
Km	Kilometre
Km^2	Kilometre squared
KSD	King Sabatha Dalindyebo
KZN	KwaZulu-Natal
l/c/d	Litre per capita per day
LM	Local municipality
m^2	Metre squared
MIG	Municipal Infrastructure Grant
Ml	Megalitres
Ml/d	Megalitres per day
mm	Millimetre
MTEF	Medium Term Expenditure Framework
NEPAD	New Partnership for Africaôs Development
NPC	National Planning Commission
NWRI	National Water Resources Infrastructure
Ph	Phase
PWS	Pilanesberg Water Supply
RBIG	Regional Bulk Infrastructure Grant
RDP	Reconstruction and Development Programme
ROA	Return on Assets
SADC	Southern African Development Community
SIPs	Strategic Infrastructure Projects
SMART	Specific Measurable Achievable Realistic Time-bound
StatsSA	Statistics South Africa
TCTA	Trans-Caledon Tunnel Authority
VIP	Ventilated Improved Pit (latrines)
WEF	World Economic Forum
WfGD	Water for Growth and Development
WLM	Westonaria Local Municipality
WRC	Water Research Commission
WSA	Water Service Authority
WTE	Water Trading Entity
WTW	Water Treatment Works
WUA	Water User Association
WWTP	Wastewater Treatment Plant
WWTW	Wastewater Treatment Works

PART A: STRATEGIC OVERVIEW

The aim of the Department of Water Affairs (hereinafter the Department) is to ensure the availability and supply of water at national level, facilitate equitable and sustainable social and economic development, and ensure the universal and efficient supply of water services at local level.

1. Vision

The vision statement of the Department is:

Safe water for all forever

2. Mission

The mission of the Department is to:

Effectively manage the nation's water resources to ensure equitable and sustainable socio-economic development and universal access to water

3. Values

The values of the Department are:

Transparency	we fulfil our mandate in an ethical manner
Respect	we respect each other as well as our clients and the needs of our citizens
Excellence	we are leaders and innovators in our sector, who get it right on time every time
Everyone	we are a caring employer who, through teamwork, serves South Africa's people

4. Legislative and other mandates

The Department's legislative mandate seeks to ensure that the country's water resources are protected, managed, used, developed, conserved, and controlled through regulating and supporting the delivery of effective water supply and sanitation. This is done in accordance with the requirements of water related policies and legislation which are critical in delivering on the right of access to sufficient food and water, transforming the economy and eradicating poverty.

The work of the Department is informed by the following key legislative policy and regulatory frameworks:

4.1. The Constitution of the Republic of South Africa

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.

The Constitution 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.

The Constitution gives national and provincial government authority to regulate local government in term of water services. It further gives them the obligation to support and strengthen the capacity of local government to provide services.

4.2. The National Water Act, 1998 (Act No 36 0f 1998)

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.

4.3. 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. This Act compels the Minister to maintain a National Water Services Information System and to monitor the performance of all water services institutions.

Currently, the provision of sanitation is governed by the Strategic Framework on Water Services (2003) and the Water Services Act. The Department's mandate is to develop policy, to regulate and oversee the provision of sanitation. The Department of Human Settlements on the other hand drives the sanitation policy review process which will result in the clarification of roles and responsibilities regarding sanitation.

4.4. Water Research Act, 1971 (Act No 34 of 1971)

This Act established the Water Research Commission and the Water Research Fund and thus promotes water related research. The Minister appoints members of the Water Research Commission (the Commission) and thus exercises executive oversight over the Commission.

4.5. Policy mandates

The fundamental principle underlying the water policy is the management of water resources to ensure equitable access, sustainable use as well as efficient and effective water use for optimum social and economic benefit. The synopsis of water related policies is provided below:

The ***White Paper on a National Water Policy for South Africa*** adopted in 1997 contextualises the development of a new water law in post democracy South Africa. It outlines the direction for the development of water law and water management systems which will take the country into the next century.

The ***Strategic Framework for Water Services*** adopted in 2003 sets out the national framework for the water services (i.e. water supply and sanitation) sector. The framework provides the vision for the water services in the country and outlines the framework that will enable this vision to be achieved.

The ***National Water Resource Strategy*** adopted in 2004 sets out the framework (i.e. strategies, plans and institutional arrangements) within which the country's water resources will be managed. It provides information about the present and future availability of and requirements for water in respective water management areas and proposes interventions by which these may be reconciled. It also quantifies the proportion of available water in each water management area. The revision process has commenced.

4.6. Relevant court rulings

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

4.7. Planned policy initiatives

The planned policy initiatives over the period are as follows:

4.7.1. ***Review of the water-related legislation***: The Department is reviewing the National Water Act, 1998 (Act 36 of 1998), the Water Services Act, 1997 (Act No 108 of 1997) and the Water Research Act, 1971 (Act No 34 of 1971).

While the National Water Act provides a legal framework for the progressive realisation of the right to access to sufficient water, the act is under review to ensure that there is equity in the allocation of water, to improve water resources management and to streamline the regulatory processes. The Water Services Act is being reviewed to improve provision of water services to ensure alignment with the provisions of the Municipal Systems Act, 2000 (Act No. 32 of 2000) and the Municipal Finance Management Act, 2003 (Act No. 56 of 2003). The Water Research Act is under review to improve the governance of the

Water Research Commission and to align the act with all other applicable legislation.

4.7.2. ***Review of the National Water Resource Strategy***: The Department is reviewing the first edition of the National Water Resource Strategy. This review provides an opportunity to ensure that water is at the centre of planning and that it supports the broad national economic and social development goals through the Water for Growth and Development (WfGD) framework without compromising the long-term sustainability of water resources.

4.7.3. ***Revision of the water pricing strategy***: The Water Pricing Strategy sets out the governmentôs approach to pricing raw water. It provides, in principle, for full cost pricing for non-agriculture water users, including depreciation and a return on assets (ROA). In practice, annual price increases have been capped and hence prices are below full cost for most agricultural water schemes and some schemes dedicated to industrial and domestic supply. The review of this strategy seeks to improve the financial viability of governmentôs bulk raw water business to ensure that this scarce resource is valued by all citizens.

4.7.4. ***Development of the funding model:*** The purpose of the development of the 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 can 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 sector.

4.7.5. ***Development of an economic regulator:*** This project explores international practice in economic regulation in the water sector, as well as economic regulation in other sectors in South Africa, in order to support the development of an economic regulator for the water sector in South Africa. The project will look into an economic regulator that regulates the entire water value chain. It will outline the functions and identify gaps in the current legislative framework for regulating the water sector. This will lead to the establishment of an effective economic regulator.

4.7.6. ***Institutional Reform and Realignment***: The Department has initiated the Institutional Reform and Re-alignment project with the aim of enhancing institutional readiness to fast-track service delivery and handle water challenges and management of water resources both at present and in the future.

5. Situational analysis

A number of events and process in the internal and external environment positively and negatively affect the Department's ability to deliver on its mandate. The most critical of these are addressed in the sections on performance and organisational environment:

5.1. Performance environment

Globalisation has over the past decades resulted in an extremely interconnected world in which changes in one part of the globe can significantly impact (i.e. positively or negatively) other areas of the globe.

The National Development Plan 2030 highlights South Africa as ranking among the lowest (i.e.128th of 132 countries) in the Yale University's Environmental Performance Index owing to the poor state of its water ecosystems. The country also ranks 148th out of 180 countries in terms of the water availability per capita. In strengthening its regulatory function, the Department has developed a Water Services Regulation Strategy which addresses the drinking and wastewater quality at local government level. This will be augmented by the development of a water resources regulatory framework which will focus on the entire water value chain.

The 2011 World Economic Forum (WEF) identified the top ten (10) risks facing the world by likelihood and impact combined. These are:

1. Climate change
2. Fiscal crises
3. Economic disparity
4. Global governance failures
5. Storms and cyclones
6. Extreme energy price volatility
7. Geopolitical conflict
8. Corruption
9. Flooding
10. Water security

While South Africa is likely to be affected by a number of these risks, for the purpose of this strategic plan the three factors of particular importance are climate change, flooding and water security. These are set within the context of extreme economic disparity and high levels of corruption. The water sector, led by the Department of Water Affairs, will have to directly address these three issues with the need to tackle water security at the national, catchment and household level.

Figure 1 below indicates that over the past decades there has been a considerable shift in the South African economy as the tertiary and secondary sectors become increasingly important while the primary sector becomes an increasingly smaller contributor to the economy.

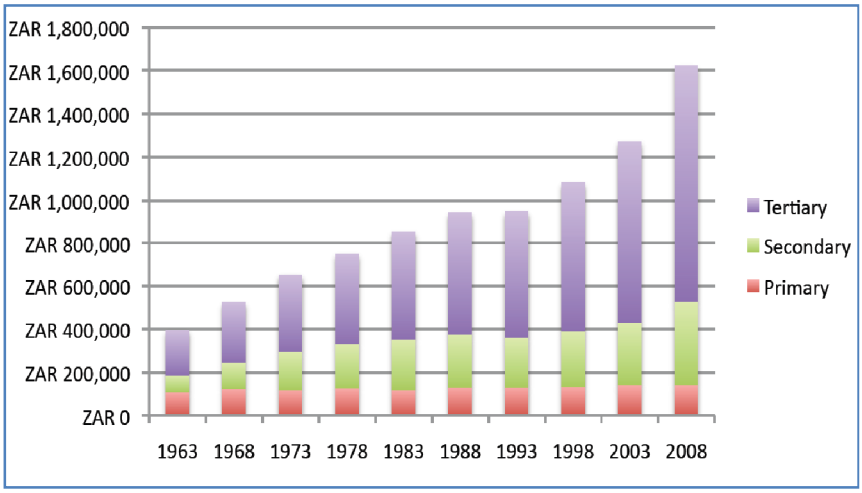

Figure 1: Shift in primary, secondary and tertiary sector contributions to the South African economy (1963 - 2008)

This abovementioned shift in the economy has implications for the nature and location of water demand as well as water management in the country. Of note is that despite this shift in the economy, commercial agriculture remains the largest water user in the country, consuming around 60per cent of the water across the country. At the same time, the primary and secondary sector impacts on water are significant in relation to the amount of water abstracted and pollution. The pollution of water resources, from among other things, wastewater treatment works is also a significant challenge.

While there is still a need for investment in water infrastructure, there is an increasing need for enhancing water use regulation and governance, particularly in catchments with high levels of water use and pollution. The capacity of the Department and the Catchment Management Agencies (CMAs) in managing and regulating the water resources will be increasingly important over the next few years. The decision to fast track the establishment of another seven CMAs, to give a total of nine CMAs across the country, is a step in the right direction.

With increasing stress (scarcity and deteriorating water quality), and the challenges of climate change, the management of South Africaôs water resources will require improved regulation (governance associated with resource protection and use), together with sound management (operation, maintenance and refurbishment) of existing infrastructure, and the development of new infrastructure (particularly for urban development, industrial requirements and rural livelihoods). Appropriate financing models will be required to fund these activities.

Water, the ecological deficit and the economy

The National Development Plan 2030 published by the National Planning Commission identifies water as a ñstrategic resource critical for social and economic developmentò According to the National Planning Commission (NPC), ñmarket and policy failures have resulted in the global economy entering a period of ôecological deficitôas natural capital (groundwater, marine life, terrestrial biodiversity, crop land and grazing) is being degraded, destroyed or depleted faster than it can be replenished.ò

The NPC has identified the creation of jobs as one of the two most critical tasks facing South Africa, with the need to create 11 million more jobs in the next 20 years. As part of the programme of stimulating the economy and creating jobs, government has developed a programme of eighteen Strategic Integrated Projects (SIPs) largely focused on infrastructure development. These SIPs are:

SIP 1	Northern Cape Mineral Belt with Waterberg as catalyst
SIP 2	Durban-Free State-Gauteng logistics and industrial corridor
SIP 3	South Eastern node & corridor development
SIP 4	Unlocking the economic opportunities in North West province
SIP 5	Saldanha-Northern Cape Development Corridor
SIP 6	Integrated Municipal Infrastructure Project
SIP 7	Integrated Urban Space and Public Transport Programme
SIP 8	Green energy in support of the South African economy
SIP 9	Electricity Generation to support socio-economic development
SIP 10	Electricity Transmission and Distribution for all
SIP 11	Agri-logistics and rural infrastructure
SIP 12	Revitalisation of public hospitals and other health facilities
SIP 13	National schools build programme
SIP 14	Higher education infrastructure
SIP 15	Expanding access to communication technology
SIP 16	SKA and Meerkat
SIP 17	Regional Integration for African cooperation and development
SIP 18	Water services and sanitation

The majority, if not all, have strong implications for water, requiring water availability for economic development, or the availability of potable water. Therefore the protection of water resources will be crucial. The Department must therefore ensure that the water related elements of the projects are integrated into the project plans and are dealt with effectively.

To enable the SIPs programme, the following issues have been identified and must be addressed: review of water use rights, implementation of water allocation reform, water build programmes and water pricing. In addition to the SIPS, the NPC makes specific reference to the need to:

- Invest in irrigation infrastructure, including water storage, distribution and reticulation, and water saving technology;
- Manage and monitor water resources for growth and sustainability;
- Develop water re-use and desalination options to meet local needs;
- Assure water supplies by investment and re-use;
- Put in place water conservation and demand management programmes; and
- Ensure appropriate institutional arrangements for water resources management.

Institutional capacity

Figure 2 below indicates that a number of institutions operate in the water sector. There have been significant challenges in the functioning and establishment of some of these institutions. The critical areas addressed in this document relate to improved institutional arrangements for the management of national water resources infrastructure. This

entails among other things a reduction in the number of Water Boards to ensure larger, financially viable institutions that can provide regional bulk services and support, especially to rural municipalities, and fast-tracking establishment of the remaining seven CMAs.

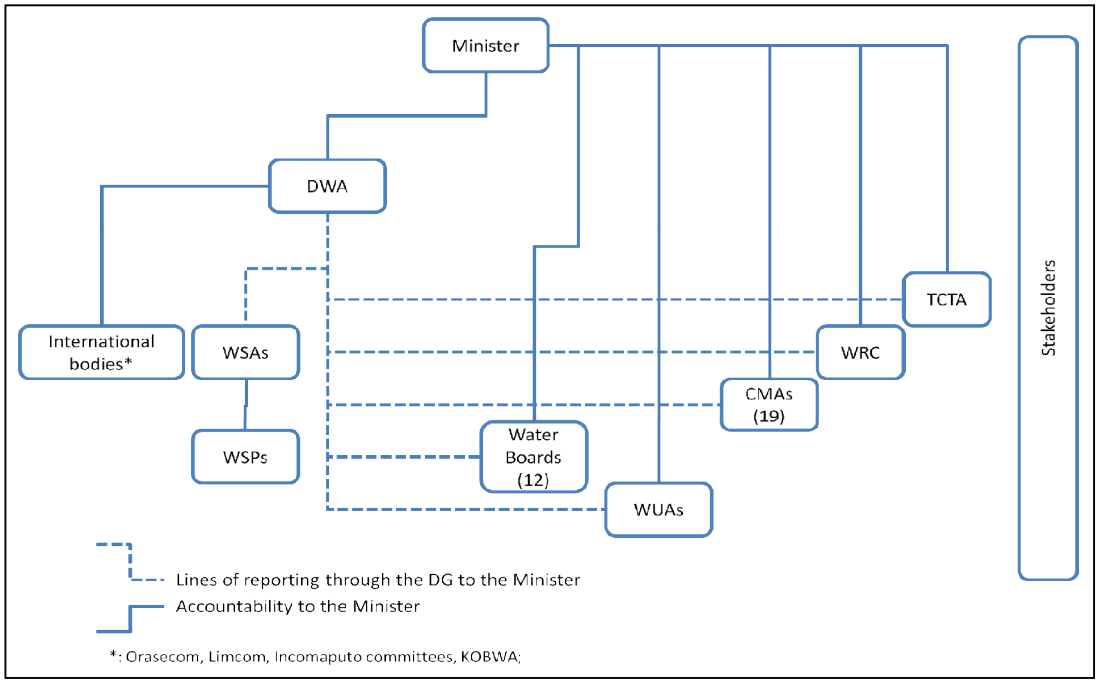

Figure 2 Water sector institutions and lines of reporting and accountability

The Water Research Commission (WRC) remains a critical water sector institution, enabling high quality research to support the water sector and water users. Improved funding of the WRC needs to be addressed to support enhanced research and technology development to meet the increasing water challenges facing the country.

The Department together with the CMAs and the TCTA are responsible for water resources, bulk water services infrastructure and catchment or national water management while local government has the constitutional obligation to provide water and sanitation services within their area of jurisdiction. However, there are major challenges at the municipal level in relation to the delivery of water services. These challenges include poor maintenance and refurbishment of infrastructure resulting in increasing interruptions in supply and high levels of unaccounted for water; poor management of wastewater treatment works resulting in deteriorating raw water quality in receiving water resources; slow delivery of sanitation services, and unaffordable technology choices in some areas. The challenges are further compounded by the inadequate cost recovery in the water services sector.

Despite the significant funding of water services through, *inter alia*, the equitable share and the Municipal Infrastructure Grant (MIG), there is considerable evidence that a very low proportion of the equitable share is actually spent on water services. In addition, billing and cost recovery are generally poor, with some areas in essence not being billed at all. As a result daily operations and especially longer term maintenance are significantly under-funded. The result of poor municipal water management increases the

demand of water quantities whilst decreasing raw water quality, both of which have major implications for water resources management, with associated financial and regulatory implications.

Unfortunately, despite the economic growth within the country, a large proportion of the population remains excluded from the formal economy, living in poverty and dependent on subsistence livelihoods and government grants. The Department has an important role to play, in ensuring that these communities are provided with safe drinking water and water for productive purposes in order to contribute to the drive to eradicate poverty. There have also been service delivery failures that have resulted in extensive service delivery protests and legal action, and the issue of sustainable service delivery must be addressed as a matter of urgency.

The role of both the Department and Water Boards in supporting local government with providing water services has been under the spotlight, and must be enhanced in the coming years. Intergovernmental co-ordination remains a significant challenge, as is seen through the lack of integration of water into/with other sector plans, and through poor co-ordination between departments. Water use licensing to support sustainable social and economic development is also a critical challenge, which is highlighted as a strategic objective in this document.

Climate change

Adapting to climate change remains a major challenge facing the country, particularly in relation to the water sector which is most vulnerable to climate change impacts. During the 2013/14 financial year a climate change strategy for the water sector which will guide responses to this issue over the following years will be finalised.

Human and financial resources

The Department continues to struggle filling posts as there is lack of technically skilled and experienced people in the country. This document highlights departmental programmes aimed at addressing this due, to the significance of its impact on delivery in the sector.

On the financial side, the global financial slow-down has impacted negatively on the South African economy, with the result that there are limited funds available from the fiscus. This, combined with repeated under-expenditure on the appropriated funds has resulted in budget cuts and no significant increases in the Department's budget. A large portion of the budget, however, is raised through the sale of water via the Water Trading Account, and it is now imperative that revenue generation and collection is improved to ensure sufficient funding for water resources management and infrastructure operation, maintenance and refurbishment. In this regard, the Raw Water Pricing Strategy will be revised during the 2013/14 financial year, and a revenue improvement plan will be implemented for the Water Trading Account.

5.2. Organisational environment

A number of changes within the internal organisational environment have been put in place to facilitate improved service delivery and further changes will be made during the 2013/14 and following financial years.

There has, over the years, been some misunderstanding relating to the Main Account and the Water Trading Account or the Water Trading Entity (WTE), as it is generally referred to. A clear separation has been made between the two into two different chapters, so that a clear distinction of activities funded through the fiscus and activities funded through the WTE can be made. This separation is also in anticipation of greater separation of these two parts of the Department in future, firstly as CMAs are established and the proto-CMAs currently residing in regional offices phased out of the Department, and secondly, as a stronger structural separation of some nature is put in place for the national water resources infrastructure functions of the Department.

Figure 3 below shows the operating model of the Department according to functions, rather than branches with the darker blue box outlining the NWRI/ WTE infrastructure functions. It is to be noted, however, that the water management functions performed by the proto-CMAs in the regional offices are also funded through the WTE.

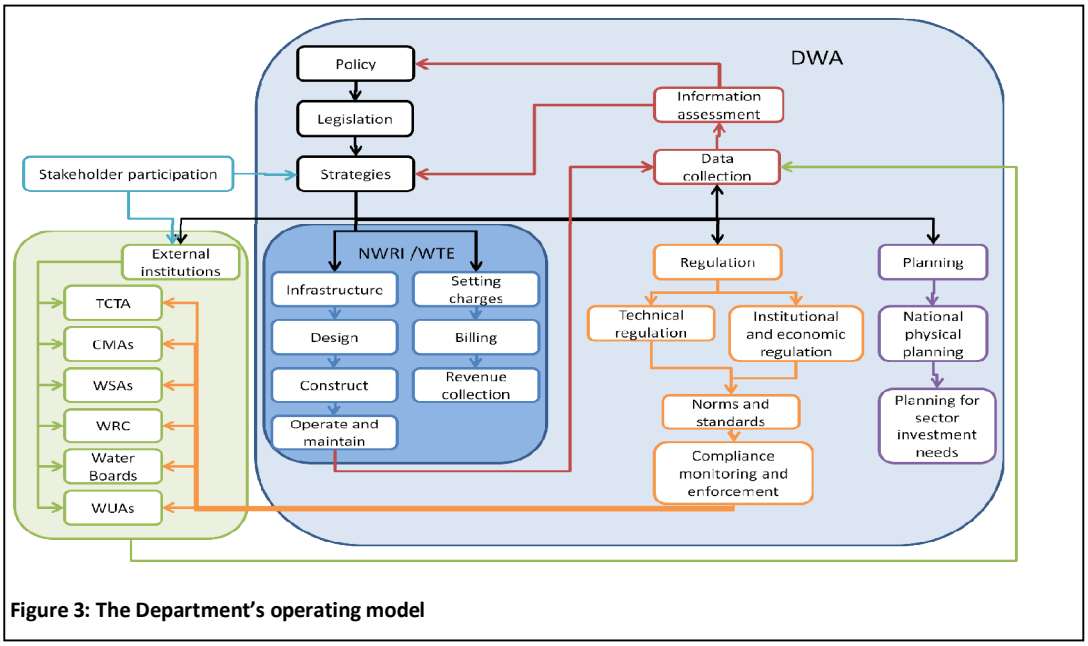

Figure 3: The Department's operating model

The changes in the institutional environment referred to in the previous section resulted in a need to reorganise the functions and structure of the Department. The re-organised structure will be in operation as from the 2013/14 financial year, and is designed to support the ongoing functions of the Department as CMAs are established and in order to improve regulation and infrastructure management. The establishment of an economic regulator will finalise this picture.

The establishment of the CMAs will see a reduction in the budget and staff in the Department over the next three to five years as functions and staff are transferred to the CMAs.

A notable change in the Department's organisational structure is the establishment of the WTE Chief Financial Officer position as recommended by the Auditor-General and announced by the Minister of Water and Environmental Affairs during her April 2012 budget vote speech.

5.3. Description of the strategic planning process

A number of changes have occurred in the planning environment of the Department. These entail a shift from an outputs-based approach to an outcomes-based approach in line with government best practice. The review of the planning processes has thus resulted in the refinement of strategic outcome oriented goals and strategic objectives on which this strategic plan is based.

Planning and performance reporting by the Department has been gradually improving and the results can be seen in this strategic planning document which is outcomes based, and focused on SMART objectives, rather than following the historical approach of output planning. This is in tandem with improvements in performance measurement and reporting systems and improved alignment between performance planning and reporting and budget planning and reporting.

This strategic plan contains revised strategic outcome goals (hereinafter referred to as Goals) and strategic objectives, aimed at streamlining the focus, planning of the Department and improving the ability to report on performance. In addition, the document has been restructured to represent these goals and strategic objectives per programme.

In order to improve the efficiency in monitoring the Department's performance, an automated monitoring and evaluation system (that uses the Balanced Score Card approach) is underway. This system will give a coherent picture of the work being done across the Department to achieve its goals and strategic objectives.

PART B: STRATEGIC OUTCOME ORIENTED GOALS OF THE ORGANISATION

During the planning process it became clear that there were significant challenges with the six previous adopted goals as some were objectives or activities rather than goals and others were no longer relevant.

6. Alignment of the strategic outcome oriented goals

No	Strategic outcome oriented goals	Government outcomes and other initiatives	Strategic objectives
1.	An efficient, effective and development oriented sector leader	12 (Public service) New Growth Path 2 (job creation)	1.1. Improve and increase the skills pool and build competencies in the Department and within the sector
			1.2. Effective and efficient internal control environment
			1.3. Implement programmes that create job opportunities
			1.4. Improve water resources and water services information
			1.5. Coordinate regional and global water cooperation
			1.6. Ensure effective performance of water management and services institutions
2.	Equitable and sustainable provisioning of raw water	6 (Infrastructure) New Growth Path 2	2.1. Ensure the availability of / access to water supply for environmental and socio-economic use
			2.2. Improve equity and efficiency in water allocation
			2.3. Strengthen and implement strategies for water management in the country
			2.4. Improve water use efficiency
3.	Provision of equitable and sustainable water services of acceptable quantity and quality	9 (Local government)	3.1. Ensure compliance to water legislation
			3.2. Support the water sector
4.	Protection of freshwater ecosystems	10 (Environment)	4.1. Ensure compliance to water legislation
			4.2. Improve the protection of water resources and ensure their sustainability

7. Programme descriptions

7.1. Programme 1: Administration

The purpose of the programme is to provide policy leadership, advice and core support services, including Finance, Human Resources, Legal, Information and Management Services, Communication and Corporate Planning.

7.1.1. Sub programmes

- *Ministry* provides support to the Minister and the Deputy Minister and makes provision for their salaries. This entails handling priority enquiries and correspondence.
- *Departmental Management* (DG's office) provides administrative support to the Director-General, secretariat services to the Department and makes provisions for salaries and other costs associated with the office of the Director-General.
- *Internal Audit* provides independent, objective assurance and advisory services designed to add value and improve the Department's operations.
- *Corporate Services* provides administrative support to the Department and comprises various sub-programmes: Human Resources, Communication services; Legal services; Administration; and Information services.
- *Financial Management* ensures the efficient management of daily financial operations, processes and systems.
- *Office Accommodation*[1] deals with payments of rental, municipal services, and rates and taxes for all accommodation leased by the Department.

7.1.2. Strategic objectives

Strategic objective 1.1	Improve and increase the skills pool and build competencies in the Department and within the sector
Objective statement	Acquire scarce, critical, technical and professional skills in the Department through the reduction of the vacancy rate and increase the intake of graduate trainees through the trainee development programme (Learning Academy)
Baseline 2012/13	Twenty percent reduction of vacancy rate for scarce, critical, technical and professional skills in the Department and an intake of 68 graduate trainees
Justification	Skills shortages impact negatively on project management and contract management in the water sector. The overall decline in the number of experienced engineering and scientists can be attributed to losing some experienced engineers to the private sector and others are on the verge of retiring.
Links	NDP, Outcome 5, Outcome 12, New Growth Path 2

[1] This sub-programme will be incorporated in the Corporate Services sub-programme during the Adjustment Estimate for National Expenditure period.

Strategic objective 1.2	Effective and efficient internal control environment
Objective statement	To institutionalise compliance with policies on sound financial management, good governance and accountability in the Department
Baseline 2012/13	Internal control environment is acceptable but not yet at the best practice level.
Justification	A high standard of professional ethics must be promoted and maintained. Efficient, economic and effective use of resources must be promoted
Links	Outcome 12

Strategic objective 1.4	Improve water resources and water services information
Objective statement	Support the availability of the uptime of all information technology networks and systems such as LOGIS, PERSAL and BAS
Baseline 2012/13	98per cent Information Technology network systems available
Justification	The reliability of an IT infrastructure is central to the performance of a modern organisation hence ensuring that an IT infrastructure is reliable is one of the important business objectives.
Links	Outcome 12 (Public Service)

Strategic objective 2.4	Improve water use efficiency
Objective statement	Support the water use efficiency initiatives by educating citizens about the value of saving and preserving water
Baseline 2012/13	5 awareness campaigns and 4 500 schools targeted for water use efficiency awareness
Justification	Increasing the public awareness on the value of saving and preserving water
Links	Outcome 10

7.1.3. Risk management

Risk	Risk description	Mitigation strategy
Capacity and skills gap	Inadequate technical skills as a result of among other things ageing workforce and resignations	Invest in the graduate trainees from the learning academy
Negative reputation	Adverse media reports about the Department resulting in disengagement with the public and low staff morale	Improve the Departmentôs image through improved media relations

7.2. Programme 2: Water Sector Management

The purpose of the programme is 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, through effective policies, integrated planning, strategies, knowledge base and procedures.

7.2.1. Sub programmes

- *Policy and Planning Management and Support* ensures the overall management and oversight of the programme by ensuring effective and efficient operation of the branch.

- *Integrated Planning* develops comprehensive plans that guide options for reconciling supply and demand, including infrastructure development, systems and services management within the water sector; and is responsible for preparing reconciliation strategies, drafting feasibility plans, compiling integrated hydrological plans, undertaking options analysis and macro planning.

- *Policy and Strategy* develops, maintains, monitors and reviews the implementation of water sector policy to ensure reliable and equitable water supply and services, and responsible for the review of National water Resources Strategy.

- *Water Ecosystems* develops and implements measures to protect water resources. This entails determining appropriate protection levels and goals described by the Class, Resource Quality Objectives and Reserves of water resources as well as developing water resource protection strategies supported by water quality management plans aimed at priority interventions.

- *Water Information Management* ensures the development and maintenance of systems and programmes for data and information acquisition and management, builds the knowledge base on all aspects of water, and coordinates and audits implementation by the Department, Catchment Management Agencies and other water management institutions or agencies. This entails providing resource quality information services, spatial and land information management, water information quality assurance and audits, information programmes, and surface and ground water information services.

- *Institutional Oversight* is responsible for institutional governance and oversight of all water institutions and facilitates their establishment and development. This entails providing institutional support, establishing Catchment Management Agencies and rendering advisory services and oversight.

7.2.2. Strategic objectives

Strategic objective 1.4	Improve water resources and water services information
Objective statement	Ensure the availability of information technology networks and systems through the development of the National Integrated Information System.
Baseline 2012/13	Various stand alone water information systems and enterprise architecture has been developed.
Justification	Contribute to informed decision making and availability of credible information throughout the water cycle.
Links	The objective contributes to outcomes 6 and 10 in terms of provisioning of information for analysis, planning, development, compliance monitoring and enforcement.

Strategic objective 1.6	To ensure effective performance of water management and services institutions
Objective statement	Ensuring compliance with statutory requirements and promote good governance.
Baseline 2012/13	16 institutions
Justification	Ensure provision of services and management of water resources
Links	National Development Plan, Outcome 6 (Infrastructure)

Strategic objective 2.1	Ensure the availability of / access to water supply for environmental and socio-economic use
Objective statement	Ensure adequate water availability for socio-economic development for the country through forward planning and managing existing and developing new water resources.
Baseline 2012/13	Four new reconciliation strategies were developed, 12 reconciliation strategies were maintained, two feasibility studies have been commenced and 1 study has been completed.
Justification	To ensure water security for the country
Links	National Development Plan, Strategic Integrated Projects, Regional Bulk Infrastructure

Strategic objective 2.3	Strengthen and implement strategies for water management in the country
Objective statement	Creation of an enabling environment for management of water resources and provision of basic water services
Baseline 2012/13	2004 Pricing Strategy, draft Water Research Bill, status quo report for Climate Change, Framework for realignment of institutions, draft National Water Resources Strategy 2 (NWRS 2) and draft Water Services Bill
Justification	To support the socio-economic development and the protection of the environment
Links	National Development Plan, Government outcomes

Strategic objective 4.2	Improve the protection of water resources and ensure their sustainability
Objective statement	Protection of water resources through setting of appropriate protection levels, monitoring and the improvement of access to information on water.
Baseline 2012/13	Preliminary low confidence reserves have been determined in most water management areas. The water resource classification system has been promulgated however there is progressive classification of water resources.
Justification	There is a general decline in the quality of water resources with marked increases in nutrient, microbiological and salinity levels. Strategies on water quality management are fragmented. The improvement in resource quality and setting clear goals in terms of water resource protection underpins water security and future water resource planning.
Links	Outcome 10

7.2.3. Risk management

Risk	Risk description	Mitigation strategy
Service delivery	Failure to meet regulatory requirements	Review legislation and policies for effective implementation
	Shortage of technical skills & capacity	Facilitate implementation of OSD
Pollution of water resources	No strategy to prevent pollution of water resources	Develop water quality management strategy & AMD strategy

7.3. Programme 4: Regional Implementation and Support

The purpose of the programme is to coordinate implementation of the Departmentôs strategic goals and objectives at the regional level (provincial), including the establishment of water resource management institutions. It facilitates water conservation and demand management and access to water infrastructure by communities.

7.3.1. Sub programmes

- *Regional Management and Support* ensures the overall management and oversight of the Programme
- *Water Sector Support coordinates* sector collaboration and intergovernmental relations at national, provincial and local level, provides hands on support to Local Government through the Rapid Response Unit and the Accelerated Community Infrastructure Programme to ensure effective, efficient, economic and sustainable provision of water supply.
- *Water Use and Regulation* coordinates, leads and manages integrated intervention for ensuring that the water resources are protected, used, conserved, managed in an equitable and sustainable manner
- *Institutional Establishment* contributes to the establishment of effective water management institutions.
- *Regional Bulk* develops regional bulk infrastructure for water supply and water treatment works and supplements regional bulk sanitation collector systems as well as regional waste water treatment works.
- *Transfer of Water Schemes* guides the transfer of the operation and maintenance functions of water services schemes to water services institutions to ensure effective local operation and management
- *Support Services* provides support services to the programme in the regions, namely human resources, financial management and general administration.
- *Water Services Projects* provides for the construction of new water services infrastructure projects such as water treatment works and pipelines
- *Integrated Catchment Management* provides for the protection, development, use and management of the resources at water management area level.
- *Mine Water Management* coordinates and oversees the management of mine water in all mining areas in South Africa with specific emphasis on Acid Mine Drainage (AMD), to treat and purify polluted acid mine water of an acceptable standard.

7.3.2. Strategic objectives

Strategic objective 1.3	Implement programmes that create job opportunities
Objective statement	Increase the number of job opportunities within regional bulk infrastructure programmes and small scale initiatives (e.g. rainwater harvesting tanks) as well as the construction of water services projects
Baseline 2012/13	1435 job opportunities
Justification	Responding to government's objective of reducing unemployment rate in the country
Links	New Growth Path, Outcome 4 (Jobs creation), IPAP 2

Strategic objective 2.1	Ensure the availability of access to water supply for environmental and socio-economic use
Objective statement	Assurance of supply through the provision of regional bulk infrastructure according to the demand of domestic, industrial and environmental users and financial support to emerging historically disadvantaged farmers. In addition planning, acceleration and implementation of various projects that will ensure water supply to identified communities that are not receiving a basic water supply service.
Baseline 2012/13	Eight regional bulk infrastructure schemes completed; financial support provided to 750 resource poor farmers; 7 000 rainwater harvesting tanks distributed; 94.7per cent of the population has access to clean and safe drinking water.
Justification	To address the socio-economic and environmental needs of the country
Links	Outcome 6 (Infrastructure), Outcome 7 (Rural development), National Development Plan, IPAP2

Strategic objective 2.4	Improve water use efficiency
Objective statement	Reduction of water loss within targeted municipalities for the domestic sector
Baseline 2012/13	117 300 000 cubic metres
Justification	The National Water Act, 1998 (Act No 36 of 1998) requires that all water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner for the benefit of all.
Links	Outcome 10 (Environment)

Strategic objective 3.2	Support the water sector
Objective statement	Support municipalities that scored less that 50per cent to improve in their Blue Drop and Green Drop scores; support municipalities with the implementation of water conservation and management initiatives; acceleration of service delivery through the implementation of the accelerated infrastructure programme; refurbish prioritised schemes within water service authorities; and interim water supply within the 23 priority district municipalities (Hotspots)
Baseline 2012/13	Municipalities that scored less than 50per cent in the • Blue Drop are 52 • Green Drop are 59 Municipalities supported with water conservation and demand management are 30 Community Infrastructure projects are 11 Prioritised refurbished schemes are 60 Hot Spot interventions are 90
Justification	The water services programmes ensure the protection, conservation and management of water resources in a sustainable and equitable manner for the benefit of the socio-economic and environmental needs of the country
Links	Outcome 9 (Local Government)

Strategic objective 4.2	Improve the protection of water resources and ensure their sustainability
Objective statement	Contribute to the protection of river sources through the implementation of the River Health programme; monitoring of sewerage pipes to the wastewater treatment works as well as implementing the immediate, short term and long term solutions to mitigate the impact of acid mine drainage especially within the Witwatersrand Basins (namely Western, Central and Eastern)
Baseline 2012/13	Implemented in 98 rivers
Justification	Ensure the protection, conservation of the environment for the benefit of the country
Links	Outcome 10 (Environment)

7.3.3. Risk management

Risk	Risk description	Mitigation strategy
Finance	Insufficient budget	Reallocation of funds especially to the projects or programmes that are not spending
Supply Chain Management	Procurement plans not followed	Training of the officers responsible for procurement processes
Human Resources	In able to attract technical and engineering professionals as a result of occupational specific dispensation (OSD)	Relax the requirements of OSD to attract the required critical skilled professionals

7.4. Programme 5: Water Sector Regulation

The purpose of the programme is to protect the resource through authorisation, monitoring compliance to legislation and enforcing compliance to legislation. It is also to protect the consumer without compromising the sustainability of the service providing institution.

7.4.1. Sub programmes

- *Regulation Management and Support* ensures the overall management and oversight of the programme. This entails providing strategic support to all sub-programmes
- *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.
- *Water Use Authorisation*[2] authorises all water use activities in South Africa by using regulatory instruments such as licensing and water allocation reform
- *Drinking Water Quality and Wastewater Services*[3] regulates the quality of drinking water and wastewater by using incentive and risk based regulation such as including the blue drop and green drop certification programmes, as well as enforcement tools such as: monitoring of drinking water quality; setting drinking water standards, prescribing wastewater treatment and processes; and accurate processing of water information
- *Resource Regulation*[4] regulates the use of resources through setting water licence conditions. Key functions performed include dam safety regulation; and water use regulation including abstraction, storage, in stream water use, stream flow reduction water use and water uses relating to waste.
- *Compliance Monitoring* coordinates and monitors compliance to standards, licence conditions and regulations across the full water value chain including water resources, dam safety, water hazards and water services.
- *Enforcement* ensures that appropriate legal action is taken against all unlawful water users. Functions performed in this sub-programme include monitoring and investigations, legal support and enforcement support.

[2] This sub-programme will be incorporated under programme 4 during the Adjustment ENE period
[3] The sub-programme name will be revised to be Water Services Regulation during the Adjustment ENE period
[4] The sub-programme name will be revised during the Adjustment ENE period to be Water Resource Regulation with the description to protect water resource quality by developing regulatory mechanisms for future, current and historical waste discharge and disposal activities

7.4.2. Strategic objectives

Strategic objectives 2.2	Improve equity and efficiency in water allocation
Objective statement	Improve equity in water allocation to ensure water availability for socio-economic development , to redress imbalances of the past, to facilitate efficient management of water resources and to protect resource quality
Baseline 2012/13	Compulsory licensing processes completed in TOSCA
Justification	To ensure that previous imbalances in water allocation are rectified
Links	Outcome 7 (Rural Development)

Strategic objectives 3.1	Ensure compliance to water legislation (Provision of equitable and sustainable water services of acceptable quantity and quality)
Objective statement	Compliance to drinking water quality standards to safeguard and enhance the health of South African citizens
Baseline 2012/13	2012 Blue Drop report
Justification	To improve public confidence by means of credible public reporting on water services performance
Links	Outcome 2 (Health), Outcome 9 (Local Government)

Strategic objectives 4.1	Ensure compliance to water legislation (protection of fresh water ecosystems)
Objective statement	To protect the integrity of water ecosystems and to prevent water related disasters
Baseline 2012/13	Dam safety regulations, 2012 Green Drop report
Justification	Improved regulation to support socio-economic development imperatives of the country and to enhance fresh water ecosystem protection
Links	Outcome 10 (Environment) , Sustainable development strategy

7.4.3. Risk management

Risk	Risk description	Mitigation strategy
Illegal water use	No strategy to curb unlawful water use Use of water resources without authorization	Develop strategy to curb unlawful water use
Pollution of water resources	No strategy to prevent pollution of water resources by users	Regulation framework developed Norms & standards developed including regulations

7.5. Programme 6: International Water Cooperation

The purpose of the programme is to strategically develop, promote and manage international relations on water resources between countries through bilateral and multilateral cooperation instruments and organisations. A further aim is to drive national interest in both Africa multilateral and global multilateral organisations and fora.

7.5.1. Sub programmes[5]

- *International Relations Management and Support* ensures overall management and oversight of the programme.
- *Africa Cooperation* fulfils the Departmentôs responsibility of advancing the African Agenda through promotion and facilitation of collaborative activities in support of the water sector through bilateral relations and participation in multilateral institutions such as the African Union (AU), African MinistersôCouncil on Water (AMCOW), the New Partnership for Africaôs Development (NEPAD) programmes and the Southern African Development Community (SADC).
- *Global Cooperation* promotes and advances national interest at global governance institutions, strategically engages bilateral countries outside Africa and further looks at leveraging opportunities for international resources from strategic donor countries.

7.5.2. Strategic objectives

Strategic objective 1.5	Coordinate regional and global water cooperation
Objective statement	To ensure International Water Co-operation and implementation of joint water projects and programmes within Africa ï SADC, Nepad AMCOW / AU, Shared River Basins ï ORASECOM, TPTC, LIMCOM , JWCôs
Baseline 2012/13	9 Existing Bilateral projects with Regional and African countries 4 Existing Bilateral Agreements signed , and projects implemented within SADC Co-operation with Multilateral Institutions like IBSA , UN, World Water Forum, Stockholm Water Week , and other International Organisations in Water Mobilisation of International Development partners ï Ongoing
Justification	For enhanced regional and international cooperation within the water sector
Links	International Water Cooperation on the advancement of national interest on water security, joint management of shared river basins and the implementation of strategic partnerships in water supply and sanitation programmes including integrated water resources management

[5] A new sub-programme on Trans-boundary water management will be added during the Adjustment ENE period with the following definition responsible for advancing the national interest within the Shared River Basin Organisations, where South Africa is sharing water with neighbouring countries, and implementing projects within the Shared River Basin. This will include Orange-Senqu River Commission (ORASECOM), LIMCOM, Tripartite Permanent Technical Committee (TPTC) Lesotho Highlands Water Project (Phase 2) and Joint Water Commissions

7.5.3. Risk management

Risk	Risk description	Mitigation strategy
Strategic Performance Management	Inadequate structure and capacity to absorb international opportunities	Matching of donor priorities with Departmental priorities and adding more capacity
		Regular donor coordination meetings held with the Department and the water sector stakeholders
		Prioritisation of international engagements
Communication and Reputational Risk	Poor image of the branch	Makgotla and intranet communication- information on web site
		Water sector stakeholder consultation on all international engagements and the solicitation of inputs through consultative processes
Process and system effectiveness	Lack of coordinated mandates and delegations representing the Department	Regularisation of the International Engagement Committee which will also deal with the nomination of officials who represent the Department
		Internalisation of the governance model of reporting on Commission work on shared river basin organisations and strategic bilateral relations

8. Resource considerations

The overview of the 2013 budget and medium term estimates is tabulated below per programme and per economic classification.

8.1. Medium term budget summary

Programme	Audited outcome			Adjusted appropriation	Medium term expenditure estimates		
Rand thousand	**2009/10**	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15**	**2015/16**
Administration	864 492	826 489	781 491	865 002	978 606	1 068 035	1 126 205
Water Sector Management	443 544	423 883	511 807	454 287	516 366	597 808	618 969
Water Infrastructure Management	2 108 080	2 132 422	2 384 020	2 251 496	2 565 203	2 945 422	3 812 823
Regional Implementation and Support	3 062 950	3 499 417	4 375 501	5 283 656	5 982 684	7 684 785	9 771 998
Water Sector Regulation	73 170	125 561	91 153	110 243	118 691	121 513	125 808
International Water Cooperation	11 441	15 922	20 934	28 478	25 413	31 456	32 613
Total	**6 563 677**	**7 023 694**	**8 164 906**	**8 993 162**	**10 186 963**	**12 449 019**	**15 488 416**

8.2. Economic classification

Programme	Audited outcome			Adjusted appropriation	Medium term expenditure estimates		
Rand thousand	**2009/10**	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15**	**2015/16**
Current payments	**2 372 629**	**2 267 272**	**2 281 457**	**2 471 209**	**2 694 426**	**2 921 940**	**3 046 718**
Compensation of employees	820 022	905 976	922 832	**1 058 264**	**1 227 209**	**1 317 747**	**1 383 700**
Salaries and wages	737 599	788 045	806 900	931 158	1 101 814	1 182 166	1 239 324
Social contributions	82 423	117 931	115 932	127 106	125 395	135 581	144 376
Good and services	1 545 752	1 358 413	1 354 670	**1 410 504**	**1 465 114**	**1 601 983**	**1 660 917**
Administrative fees	6 612	8 684	8 850	11 097	13 362	14 360	15 298
Advertising	11 118	26 019	28 944	13 921	21 392	25 642	24 976
Assets less than the capitalisation threshold	8 353	7 202	8 813	25 116	16 353	17 437	18 165
Audit cost: External	13 219	15 592	17 446	0	0	0	0
Bursaries: Employees	5 166	3 180	2 726	3 614	4 732	5 061	5 302

Programme	Audited outcome			Adjusted appropriation	Medium term expenditure estimates		
Rand thousand	**2009/10**	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15**	**2015/16**
Catering: Departmental activities	5 429	4 557	8 469	10 916	13 128	14 266	14 679
Communication (G&S)	60 819	55 404	43 734	27 311	36 659	43 897	39 473
Computer services	206 175	180 183	129 440	93 848	130 354	145 605	146 791
Consultants and professional services: Business and advisory services	360 858	204 074	166 041	199 180	153 249	164 289	172 247
Consultants and professional services: Infrastructure and planning	196 092	159 972	175 783	275 727	193 144	238 759	238 048
Consultants and professional services: Laboratory services	7 141	4 032	3 477	7 415	6 677	7 400	8 512
Consultants and professional services: Legal costs	2 664	8 465	5 855	2 720	6 420	16 413	18 089
Contractors	57 506	66 660	102 419	52 862	143 425	109 920	114 898
Agency and support / outsourced services	99 237	111 586	116 913	66 014	53 094	65 949	69 568
Entertainment	373	106	110	796	1 287	882	925
Fleet services (including government motor transport)	-	49	-	4 034	35	37	39
Housing	-	-	-	1 002	0	0	0
Inventory: Food and food supplies	4 894	2 214	2 407	280	1 892	4 172	3 693
Inventory: Fuel, oil and gas	4 341	5 015	4 426	6 754	5 171	5 883	6 161
Inventory: Learner and teacher support material	2 462	82	51	766	1 264	1 358	1 363
Inventory: Materials and supplies	15 236	12 959	11 341	8 652	7 785	8 521	8 930
Inventory: Medical supplies	347	110	113	500	1 146	1 241	1 320
Inventory: Medicine	-	-	-	0	21	22	23
Inventory: Military stores	-	1 791	2	0	0	0	0
Inventory: Other consumables	12 973	10 278	9 157	18 736	12 162	13 079	13 218
Inventory: Stationery and printing	22 340	21 658	20 894	26 189	25 148	25 536	27 440
Operating leases	175 286	217 207	182 476	17 562	12 910	14 763	14 961
Property payments	21 593	14 301	47 091	336 230	368 678	394 676	414 298
Transport provided: Departmental	16	383	565	3 001	2 029	2 198	2 315

Programme	Audited outcome			Adjusted appropriation	Medium term expenditure estimates		
Rand thousand	**2009/10**	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15**	**2015/16**
activity							
Travel and subsistence	181 863	173 903	208 302	143 891	172 885	195 201	210 635
Training and development	19 094	19 475	18 886	22 413	30 260	31 696	33 767
Operating payments	37 399	10 401	11 087	10 831	9 973	10 635	12 175
Venues and facilities	7 146	12 871	16 843	20 681	17 028	18 394	18 837
Rental and hiring	-	-	2 009	-1 555	3 451	4 691	4 771
Interest and rent on land	6 855	2 883	3 955	**2 441**	**2 103**	**2 210**	**2 101**
Interest (Incl. interest on finance leases)	-	1 935	3 021	2 441	2 013	2 210	2 101
Rent on land	6 855	948	934	0	90	0	0
Transfer and subsidies	**3 135 180**	**3 227 040**	**3 486 086**	**2 909 431**	**3 916 370**	**4 884 721**	**7 686 302**
Provinces and municipalities	908 875	985 044	992 469	562 556	1 024 029	1 508 665	3 142 309
Municipalities	908 875	985 044	992 469	562 556	1 024 029	1 508 665	3 142 309
Municipal bank accounts	908 875	985 044	992 469	562 556	1 024 029	1 508 665	3 142 309
Departmental agencies and accounts	1 958 464	1 992 802	2 259 018	2 140 442	2 431 547	2 805 734	3 668 814
Departmental agencies (non-business entities)	1 958 464	1 992 802	2 259 018	2 140 442	2 431 547	2 805 734	3 668 814
Foreign governments and international organisations	177 081	180 275	179 738	180 625	188 624	197 922	204 917
Public corporations and private enterprises	43	9 667	-	0	250 000	350 000	650 000
Public corporations	43	9 667	-	0	50 000	350 000	650 000
Subsidies on products and production (pc)	43	9 667	-	0	0	0	0
Other transfers to public corporations	-	-	-	0	50 000	350 000	650 000
Private enterprises	-	-	-	0	200 000	0	0
Other transfers to private enterprises	-	-	-	0	200 000	0	0
Non-profit institutions	450	-	3	25 808	22 170	22 400	20 262
Households	90 267	59 252	54 858	7 420	9 510	9 107	6 358
Social benefits	55 182	19 942	38 136	18 388	12 660	13 293	13 904
Other transfers to households	35 085	39 310	16 722	**2 909 431**	**3 916 370**	**4 884 721**	**7 686 302**

Programme	Audited outcome			Adjusted appropriation	Medium term expenditure estimates		
Rand thousand	**2009/10**	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15**	**2015/16**
Payment for capital assets	**1 005 591**	**1 523 761**	**2 371 917**	**3 612 522**	**3 576 167**	**4 642 358**	**4 755 396**
Buildings and other fixed structures	974 107	1 290 748	2 285 168	3 512 658	3 475 584	4 558 314	4 663 607
Buildings	-	1 248	-	2 021	0	0	0
Other fixed structures	974 107	1 289 500	2 285 168	3 510 637	3 475 584	4 558 314	4 663 607
Machinery and equipment	30 758	225 624	66 616	84 669	93 239	76 033	83 936
Transport equipment	599	200	888	546	0	0	0
Other machinery and equipment	30 159	225 424	65 728	84 123	93 239	76 033	83 936
Biological assets	**4**	-	-	0	0	0	0
Software and other intangible assets	**722**	**7 389**	**20 133**	15 195	7 344	8 011	7 853
Payments for financial assets	**50 277**	**5 621**	**25 446**	0	0	0	0
Total economic classification	**6 563 677**	**7 023 694**	**8 164 906**	**8 993 162**	**10 186 963**	**12 449 019**	**15 488 416**

8.3. Expenditure trends

The spending focus of the Department over the medium term will be on funding of water resources infrastructure management and regional implementation and support programmes for bulk water infrastructure in order to accelerate the delivery of water to households, agriculture and industry. As such, of the bulk the Department's allocation over the medium term goes towards expenditure on transfers and subsidies to public entities for the development of new water resources infrastructure for the maintenance and operations of existing water infrastructure to the Water Trading Entity and the partial support for the payment of the operational budget for the Breede-Overberg Catchment Management and Inkomati Catchment Management Agencies and payments for capital assets for the development of bulk raw water schemes and waste water treatment works.

Spending grew between 2009/10 and 2012/13 in the *Regional Implementation and Support* programme under payments of capital assets due to the implementation of the regional bulk water infrastructure projects and the *International Water Cooperation* programme, under Goods and Services is due to strengthen international relations with neighbouring countries. These two items are also expected to grow significantly over the medium term.

The projected increase in spending on transfers and subsidies over the medium term is due to additional allocations for the Pilanesberg and iLembe bulk water schemes, the refurbishment of regional raw water treatment works in Amatole district municipality and local government.

The projected increase in payments for capital assets is to implement a rapid intervention programme that focuses community infrastructure, water conservation and demand management, and waste water infrastructure refurbishment programme. This also explains the increase in expenditure in the *Regional Implementation and Support* programme over the medium term.

Spending in the *Water Infrastructure Management* programme is expected to grow significantly over the medium term due to an additional allocation of R1.5 billion for the De Hoop Damôs bulk distribution system. The Department receives additional allocations over the MTEF period of R1.286 billion in 2013/14, R2.876 billion in 2014/15 and R5.5 in 2015/16, to be used as follows:

- R91.3 million over the medium term for improvements in conditions of service
- R150 million in 2013/14 for acid mine drainage
- R4.3 billion over the medium term for the municipal water infrastructure grant to provide for interim water supply to rural households
- R3.7 billion over the medium term for the regional bulk infrastructure grant for the upgrades and refurbishment of existing 6 plants and bulk water infrastructure projects.

Budget reductions of R38.4 million in 2013/14, R83.8 million in 2014/15 and R131.5 million in 2015/16 were implemented across all programmes, mainly in spending in compensation of employees and various goods and services items, such as communication, travel and subsistence, and consultants.

The Department has an establishment of 4 223 funded posts and 184 posts additional to the establishment. As at 30 September 2012, 3 494 posts were filled and 729 were vacant. The ratio of support staff to line function staff was 1:3.

In 2012/13, the Department had a budget of R498.5 million for consultants throughout the Department, which is equivalent to 47.3 per cent of the budget allocated for spending on compensation of employees. Consultants are used to support critical skills and provide technical expertise.

Infrastructure spending

Over the medium term the projected expenditure on infrastructure is projected to be as follows; the detail per project is provided in table 2.

Table 1: Projected expenditure on infrastructure over the medium term

Description	Audited outcome			Adjusted appropriation	Medium term expenditure estimates		
Rand thousand	**2009/10**	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15**	**2015/16**
Small infrastructure	458 123	620 141	1 098 391	1 417 400	1 452 069	1 946 888	2 146 500
Large infrastructure	136 524	230 609	593 645	931 296	1 114 517	1 579 924	1 626 354
Mega Infrastructure	23 641	18 800	46 571	174 405	636 811	956 084	1 098 800
TOTAL	**618 288**	**869 550**	**1 738 607**	**2 523 101**	**3 203 397**	**4 482 896**	**4 871 654**

9. Grants to municipalities

Table 2: Regional bulk infrastructure grant

Name of grant	Regional bulk infrastructure grant (RBIG)
Purpose	To develop infrastructure required to connect or augment a water resource to infrastructure serving extensive areas across municipal boundaries or large regional bulk infrastructure serving numerous communities over a large area within a municipality and in the case of sanitation, supplement regional bulk collection as well as regional wastewater treatment works
Performance indicator	Number of bulk infrastructure schemes completed
Continuation	The grant is to continue
Motivation	The total need for bulk water infrastructure in the country is estimated to exceed R 171 billion. .

Table 3: Water services operating and transfer grant

Name of grant	Water services operating and transfers grant
Purpose	To subsidise water schemes owned and/or operated by the Department or by other agencies on behalf of the Department and transfer these schemes to local government
Performance indicator	Number of prioritised schemes refurbished
Continuation	The grant will continue up to 2014/15 financial year; however beyond this budget allocations are under consideration
Motivation	The initial plan was that the subsidy will end 2011/12. This could not occur due to the majority of municipalities experiencing challenges to efficiently, effectively and successfully manage operations of schemes. Further, the Department had not completed transfers to municipalities, in terms of variation orders, transfers to meet Transfers Agreement/ contract; price escalations; None transfers of the staff; components/schemes not included during first and second functional assessments for refurbishment as well as additional funding requested by WSAs. As a result, National Treasury in consultation with (Water Affairs: National transfers) has in view of the information indicated above decided to extend the life period of the subsidy and has requested the Department to develop a phase out/ exit plan. National transfers is in process of developing such a plan which will be presented to the signatories of the joint policy positions on transfers who will in turn determine the future existence of the grant.

Table 4: The Municipal Water Infrastructure Grant

Name of grant	The Municipal Water Infrastructure Grant
Purpose	To facilitate the planning, acceleration and implementation of various projects that will ensure water supply to communities identified as not receiving a basic water supply service.
Performance indicator	Number of households provided with (interim or basic) water supply in the 23 (24) priority district municipalities
Continuation	The grant will continue until 2015/16, subject to review
Motivation	To assist Water Services Authorities (WSA) to provide water supply services to consumers without services, particularly those in rural areas.

10. Entities

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

Water Trading Entity

A water trading account was established in 1983 to ring fence the Departmental revenue collected through the sale of bulk water and related services from voted appropriations. This trading account was subsequently amended by the Public Finance Management Act of 1999 under which in 2008 it became a Water Trading Entity (WTE). The rationale for this amendment was to create an entity which would manage the recovery of usage costs to ensure the long-term sustainability of the country's water resources.

The WTE is not listed as a schedule entity in the PFMA and thus functions within the administration of the Department. The Director-General appointed in terms of section 36(b) of the PFMA is the head of the entity.

The WTE has two components namely water resources management and infrastructure management. The water resources management component oversees the management of water quality, conservation and allocation of water through Catchment Management Agencies (CMAs) and where CMAs are not established yet this is done through proto-CMAs located in regional offices. The infrastructure component on the other hand oversees the operations and maintenance of existing water infrastructure as well as the development of new infrastructure.

Funding for the WTE (i.e. for operations and maintenance as well as the development of new infrastructure) comes from revenue that is generated from raw water charges in terms of the pricing strategy. It also receives augmentation from the fiscus through the National Water Resource Infrastructure programme. The water resources management charges cover the operational costs of all water management areas.

Programme 1: Administration

The purpose of the programme is to provide policy leadership, advice and core support services, including Finance, Human Resources, Legal, Information and Management Services, Communication and Corporate Planning.

Sub programmes

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

Strategic objectives

Strategic objective 1.2	Effective and efficient internal control environment
Objective statement	To achieve a clean audit report
Baseline 2012/13	Qualified report
Justification	Sound financial management of public funds
Links	Operation clean audit, Outcome 12, NDP

Programme 3: Water Infrastructure Management

The purpose of the programme is to ensure a reliable supply of water from bulk raw water resources infrastructure, within acceptable risk parameters, to meet sustainable demand objectives for South Africa. Solicit and source funding to implement, operate and maintain bulk raw water resources infrastructure in an efficient and effective manner by strategically managing risks and assets.

Sub programmes

- *Infrastructure development and rehabilitation* provide for the design, construction and commissioning of new water resource infrastructure; and the rehabilitation of existing infrastructure to ensure the safety and functionality of the Departmental dams and related infrastructure.
- *Operation of water resources* provides for the augmentation of the water trading water entity to ensure the effective management of water resources and the sustainable operation and management of bulk raw water infrastructure.

Strategic objectives

Strategic objective 1.3	Implement programmes that create job opportunities
Objective statement	Increase the number of job opportunities within infrastructure development programmes
Baseline 2012/13	5000
Justification	Responding to governmentôs objective of reducing unemployment rate in the country
Links	New Growth Path, Outcome 4, IPAP 2

Strategic objective 2.1	Ensure the availability of / access to water supply for environmental and socio-economic use
Objective statement	Assurance of supply according to the demand of domestic, industrial and environmental users
Baseline 2012/13	Current demand is 6 158 million cubic metres
Justification	To address socio-economic and environmental needs of the country
Links	Outcome 6, NDP, IPAP2

Risk management

Risk	Risk description	Mitigation strategy
Governance, Risk and Compliance	Qualified Audit Opinion for the NWRI Branch	1) Ensure that the policy management system is in place and used to develop and maintain the Branch's policies
		2) Commence the review of all policies and procedures
		3) Establishment of the NWRIB as a government component
		4) Implementation and maintenance of the NWRIB finance turnaround strategy.
		5) Finalization of the funding model and business models
		6) Develop SHEQ policies and procedures for NWRI
		7) Customisation and implementation of the latest version of SAP.
		8) Review, and approve the new delegations of authority.
		9) Ensure that the required document management system is developed and implemented
		10) Knowledge management system to be implemented.
		11) Implement Compliance Management within the Branch. Implement the policy, strategy and the implementation of the CM system
		12) Meet with Internal Audit and devise a strategy to solicit their guidance and support and develop an audit plan for the branch
		13) Develop a revised fraud prevention plan and strategy for the branch
		14) Ensure that an effective strategy management system is used whereby the design of the strategy is leading practice while the measuring and monitoring of achievement of the strategy is robust and continuously monitored for relevance and setting of business performance targets
		15) Ensure that the Branch has the required business and support business processes, systems in place in terms of the requirements of the PFMA, TR's and a host of applicable legislation via the use of integrated corporate governance, risk management and compliance functions; management self audits (CRSA's) and reliance placed on work performed by internal and external audit. Commence business process re-engineering.
		16) Ensure that the Branch develops and implements the required business performance management system and that such system is used to measure, monitor and report on both business and people performances against set KPA's and KPI's
Gov Human Effectiveness	Inability by the Branch to attract and retain the required skilled, knowledgeable and experienced people within the organisation that will address the current professional and technical staff profile	1) Ensure that the required recruitment and retention strategy and plan are developed for the Branch.
		2) Regular reports from Chief Directorates concerning vacancies and status of filling of key positions and recommend the filling of those vacancies as a matter of urgency.
		3) Ensure that Branch can leverage on Occupation Specific Dispensation (OSD) to retain and attract technical scarce resources
Hu Service Delivery and Reputational Risk	Inability to guarantee sustainable provision and maintenance of bulk raw water to customers due to the aging and current condition of the water resource infrastructure - ineffective strategic water	1) Ensure that the required EPP and water infrastructure plan are in place together with associated contingency and redundancy plans
		2) Ensure that appropriate funding is requested in order to undertake required preventative as well as backlog maintenance for 2012/2013
		3) Situational analysis undertaken in order to draw attention to the gravity of the water infrastructure

Risk	Risk description	Mitigation strategy
	infrastructure asset management	condition, potential penalties by Eskom and this used as an appropriate lobbying mechanism - use made of the asset management report
		4) Obtaining Cabinet buy-in on the seriousness of the Water Resource Infrastructure situation via the intervention actions of the DWA accounting officer - cabinet submission
		5) Ensure that strategic asset management has a formal IAM strategy, framework, system in place and that appropriate asset management life-cycle models are used
		6) Management should also design and implement procedures to ensure that the revaluation of assets is correctly accounted for in the financial statements and that the disclosure made in the financial statements comply with IAS16.
		7) Implementation of an asset information management system.
		8) Ensure review of Asset Management Plan on annual basis.
		9) Finalise the integrated infrastructure plan
		10) Revision of the pricing strategy + the issue of capping
		11) An adjustment to procurement landscape/legislation
		12) Develop long-term operations and maintenance plans
Financial Management, Service Delivery and Process and System Effectiveness	Inability by the Branch to continue to live out its mandate after a business, financial, information technology or natural disaster has occurred.	1) Ensure that a business continuity implementation plan (BCP) is developed for the Branch which includes business recovery, disaster recovery, incident management, emergency management and crisis management measuring and monitoring system
Service delivery	Inability to complete approved new augmentation projects developed for energy, domestic, mining & industrial sectors as timeously planned and within budget and specifications	1) Integrated governance / institutional structure for project implementation ï final
		2) Infrastructure funding model to be developed and implemented

Programme 4: Regional Implementation and Support

The purpose of the programme is to coordinate implementation of the Departmentôs strategic goals and objectives at the regional level, including the establishment of water resource management institutions. It facilitates water conservation and demand management and access to water infrastructure by communities.

Sub programmes

- *Integrated Catchment Management* provides for the protection, development, use and management of the resources at water management area level.

Strategic objectives

Strategic objective 2.2	Improve equity and efficiency in water allocation
Objective statement	Improve equity in water allocation through prioritising water use licence applications for Historical Disadvantaged Individuals (HDIs) to access water for socio-economic benefit
Baseline 2012/13	Water use licences issued to Historical Disadvantage Individuals (HDIs) are 159 and the volume of water allocated is 17 million cubic metres
Justification	To ensure that previous imbalances in water allocation are rectified
Links	Outcome 7 (Rural Development)

Strategic objective 2.4	Improve water use efficiency
Objective statement	Reduction of water loss around catchment areas through the water conservation and demand management programme
Baseline 2012/13	165 million cubic metres
Justification	The National Water Act, 1998 (Act No 36 of 1998) requires that all water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner for the benefit of all.
Links	Outcome 10 (Environment)

Strategic objective 4.2	Improve the protection of water resources and ensure their sustainability
Objective statement	Monitoring of the water resource quality through sampling points and pollution inspections
Baseline 2012/13	1705 sampling points, 736 waste discharge points and 186 mines were inspected
Justification	The National Water Act, 1998 (Act No 36 of 1998) requires that all water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner for the benefit of all.
Links	Outcome 10 (Environment)

Trans-Caledon Tunnel Authority (TCTA)

The Trans-Caledon Tunnel Authority (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.

Water Research Commission (WRC)

The Water Research Commission (WRC) was established in 1971 to generate new knowledge and to promote the countryôs 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 Departmentôs 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.

Catchment Management Agencies

The 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 and to date the existing CMAs are the Inkomati CMA and the Breede-Overberg CMA.

In contribution to the Departmentôs 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

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). They 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 12 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.

The 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 Departmentõs 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 5: List of entities to be evaluated during the period

No	Name of entity	Province	Current annual budget	Date of next evaluation
1.	Trans-Caledon Tunnel Authority (TCTA)	National	R3.9 billion	January 2013
2.	Water Research Commission (WRC)	National	R 205 462 391	January 2013
3.	Inkomati CMA	Mpumalanga	R 49,474,000	December 2012
4.	Breede-Overberg CMA	Western Cape	R 19,140,000	December 2012
5.	Amatola Water	Eastern Cape	R 172,967,000	The previous evaluation was done in Sept 2012 and the next will be between July and Aug 2013
6.	Botshelo Water	Free State	R 79,500,000	
7.	Bushbuckridge Water	Mpumalanga	R 115,349,000	
8.	Bloem Water	Free State	R 362,211,000	
9.	Lepelle Northern Water	Limpopo	R 230,590,000	
10.	Magalies Water	Gauteng and North West	R 219,293,000	
11.	Mhlathuze Water	KwaZulu-Natal	R 123,151,000	
12.	Overberg Water	Western Cape	R 25,000,000	
13.	Pelladrift Water	Northern Cape	R 12,200,000	
14.	Rand Water	Gauteng, Mpumalanga, Free State and North West	R 7,500,000,000	
15.	Sedibeng Water	Free State, North West and North Cape	R 399,800,000	
16.	Umgeni Water	KwaZulu-Natal	R 1,399,000,000	

Part C: Links to the long-term infrastructure and other capital plans

Tabulated below is the Departmentôs long-term infrastructure and other capital plans: outlining the infrastructure investment needs for the next 10 years.

Table 6: Water infrastructure (regional bulk infrastructure) investment plan for the next 10 years

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
Mega projects (over R400 million per year for a minimum of three years, or at least R1 billion total project cost)								
1.	Sebokeng WWTW and Meyerton WWTW. (Sedibeng Bulk Regional Sewerage Scheme)	Gauteng	Tender	Extension of Sebokeng WWTW from the current capacity of 100Ml to 200Ml. Extension of the Meyerton WWTW from the current capacity of 10Ml to 25Ml	Waste Water Services	1 456 000	September 2012 for Sebokeng and Meyerton	In 36 months
2.	Sedibeng Bulk Regional Sewerage Scheme (Divided into Sebokeng WWTW and Meyerton WWTW)	Gauteng	Design	The sanitation infrastructure is old resulting in high maintenance costs and frequent failures. Most of the existing WWTW in the system are also at capacity and will not be able to handle the planned future development. For this reason, a new Sedibeng regional sanitation scheme was proposed	Waste Water Services	2 400 000	September 2014 for Sedibeng	In 48 months
3.	OR Tambo Mthatha Bulk Water Supply (Divided into various projects)	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Abstraction point – Abstraction works, 2 pump stations and 2km of 1 700mm diameter rising mains. Water Treatment Works – 175 Ml/d treatment facility, upgradable in 25Ml/d modules as demand grows; 2 x 25Ml raw water reservoirs; 2 x 25Ml clear water reservoirs, KSD – 1 Pump station; 18 command reservoirs with a total capacity of 50Ml; 208km bulk pipelines, NLM – 2 Pump stations; 8 command reservoirs with a total capacity of 39Ml; 552km of bulk pipelines	Bulk Water Supply	2 705 000	January 2013	In 60 months
4.	Greater Sekhukhune DM Regional Bulk water and waste water infrastructure (De Hoop)	Limpopo SIP 1 (Unlocking the Northern Mineral Belt with Waterberg as the Catalyst) SIP 6 (Integrated Municipal Infrastructure Project)	Prelim Design	Reservoirs, booster pump station, rising mains different sizes, gravity mains different sizes.	Bulk Water Supply	2 088 000	February 2012	In 80 months
5.	Upgrade of Vaal Gamagara Scheme	Northern Cape SIP 11 (Agri-logistics and rural infrastructure)	Construction	Upgrade existing pipeline, water treatment works, reservoirs, pump stations	Bulk Water Supply	2 000 000	August 2012	In 54 months
Large projects (cost between R90 and R400 million per year -Totalling at least R250 million but less than R1 billion)								
6.	Ndlambe Bulk Water Supply	Eastern Cape	Construction	Construction of Bulk pipeline from Grahamstown to Port Alfred and all coastal Towns and resrvoirs at each coastal Town. Upgrade the WTW in Grahamstown to meet the requirements of Ndlambe Municipality. Draw water from Glen Melville dam.	Bulk Water Supply	879 000	October 2012	In 50 months
7.	Mbizana Regional Bulk Water Supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Phase 1 comprises (i) the raw water supply system (including the proposed Ludeke Dam, raw water pump station and 500 mm diameter raw water rising main pipeline); (ii) a 10 Ml/day upgrade and extension of the Nomlacu Water Treatment Plant (near the town of Bizana); and (iii) the initial development of the bulk treated water supply system (including bulk pipelines, bulk	Bulk Water Supply	780 000	February 2010	In 60 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				reservoirs and a pump station).				
8.	Ingquza Hill Regional Bulk Water Supply Scheme	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	The population to benefit from this project totals 267 425 residents. The study area covers the entire QLM, falling within the jurisdiction of the OR Tambo District Municipality, covers an area of 2 477km2. The Municipality extends from Mtentu River in the east to the Mzintlava River in the west and inland for just over 60km. The long-term water demand for the QLM is estimated at between 15 Ml/d and 18 Ml/d assuming that consumption increases from 25l/c/d to an ultimate demand of 75l/c/d. (Current demand - GAADD at the Lusikisiki Water works is around 50l/c/d).	Bulk Water Supply	954 000	January 2014	In 48 months
9.	Westonaria/Randfontein Regional Bulk Waste Water Treatment Works (Hannes Van Niekerk) also see below	Gauteng	Construction	Waste Water Treatment Works, comprises the upgrade and extension of the Hannes van Niekerk WWTP to cater for the Western areas of the WLM. It is envisaged to extend the Hannes van Niekerk WWTP with 15Mℓ/d, this by constructing 10Mℓ/d and 5Mℓ/d by 2015 and 2020 respectively. The new Zuurbekom Plant with a final capacity of 60Mℓ/d will be constructed in 20Mℓ/d modules. The first phase will consist of two 20Mℓ/d modules.	Waste Water Services	266 000	January 2012	In 12 months
10.	Westonaria/Randfontein Regional Bulk Waste Water Treatment Works(Zuurbekom)	Gauteng	Design	The Housing developments in Westonaria Local Municipality (WLM) are such that it is foreseen that an additional 38Mℓ/d of sewage treatment capacity must be catered for in 2015 and an additional 67 Mℓ/d by 2020. From the Feasibility study the preferred alternative comprises the upgrade and extension of the Hannes van Niekerk WWTP to cater for the Western areas of the WLM. Furthermore, this option allows for the installation of a new WWTP, hereafter referred to as the Zuurbekom WWTP, on the eastern side of the WLM to address the needs for the eastern areas. It is envisaged to extend the Hannes van Niekerk WWTP with 15Mℓ/d, this by constructing 10Mℓ/d and 5Mℓ/d by 2015 and 2020 respectively. The new Zuurbekom Plant with a final capacity of 60Mℓ/d will be constructed in 20Mℓ/d modules. The first phase will consist of two 20Mℓ/d modules. The completion target dates for Zuurbekom are 2015 and 2020. Actual flow generated will determine future phases beyond 2020.	Waste Water Services	621 520	September 2013	In 36 months
11.	Western Highveld Regional Bulk Water Supply	Gauteng	Construction	Water Treatment Works. Refurbishment of the Bronkhorstspruit Water Treatment Works to ensure more supply into the Western Highveld Scheme. An additional 30 Ml/d to be supplied by Rand Water, via the Mamelodi pipeline, into the system	Bulk Water Supply	486 000	November 2011	In 48 months
12.	Pongolapoort Bulk Water Scheme	KwaZulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Water supply from Jozini in the south, to the boundaries of the Shemula Water Supply Scheme to the north supplying Ingvavuma and surroundings in the north. 1.2ml/per day package treatment plant, bulk mains, pump stations, 6 reservoirs	Bulk Water Supply	674 004	February 2011	In 36 months
13.	Greater Mthonjaneni Bulk Phase 1 to 3 Bulk Water Supply	KwaZulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Construction	20ML Water Treatment Works, 2.5ML Zimele Reservoir, Pump stations & booster pumpstations and rising main.	Bulk Water Supply	668 849	March 2010	In 48 months
14.	Ngcebo Regional Bulk Water Supply	KwaZulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The primary purpose of the Ilembe DM's Ngcebo 3 Bulk Water Supply Scheme is to provide potable water to the rapidly developing North Coastal area of KZN between the development node of Ballito and the northern boundary the Ilembe DM.	Bulk Water Supply	682 610	September 2011	In 60 months
15.	Lower Thukela Bulk Water Supply Scheme (Umgeni Water Board)	KwaZulu-Natal SIP 6 (Integrated Municipal	Construction	In broad terms, the scheme consists of an abstraction works with a weir in the lower Thukela River, near the town of Mandini, with an adjacent low-lift pump station. From here raw water is	Bulk Water Supply	965 000		

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
		Infrastructure Project)		transferred to the treatment works located above the banks of the river where it is treated to potable standards and then pumped, via a high-lift pump station and a rising main pipeline to a command reservoir a short distance away. Water from the reservoir then feeds a gravity main pipeline which discharges this water into the Mvoti Reservoir at KwaDukuza (Stanger) in addition to a number of off-take points along the way.				
16.	Umshwathi Bulk Water Supply Scheme	KwaZulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Tender	The scheme consists of three phases: Phase 1: 26km long 750NB steel pipeline from Claridge to Wartburg, 1.25Mw booster pump station and 5ML reservoir. Phase 2: 16km long 600NB steel pipeline from Wartburg to Dalton, 1.35MW booster pump station and 10ML reservoir. Phase 3: 11km long 550NB pipeline from Dalton to Efaye Take-off, 21km long 500NB steel pipeline from Efaye Take-off to Ozwathini, 15km long 250NB steel pipeline from Efate Take-off to Nadi Reservoir, 0.15Mw and 0.5Mw booster pump stations.	Bulk Water Supply	747 840		
17.	Mogalakwena Bulk Water Supply	Limpopo SIP 1 (Unlocking the Northern Mineral Belt with Waterberg as the Catalyst)	Construction	Part 1 of phase1: Construction of 25.83km from Fotane to Seema. Refurbishment of 19 boreholes at plankekwellfield. Equipping of new two boreholes at plankekwellfield. Part 2 Phase 1. Construction of bulk pipeline from Fothane to Sekuruwe.Contruction of bulk pipeline to link wellfield with raw water pipeline. Construction of new command reservoir	Bulk Water Supply	1 530 000	September 2008	In 84 months
18.	Nebo Bulk Water Supply	Limpopo SIP 1 (Unlocking the Northern Mineral Belt with Waterberg as the Catalyst)	Construction	Construction of 33 km Steelpipe OD 450mm, 2 X Pump Station, 10ml Reservior and Water Treament Works (10Ml/day , 12Ml/day Summer Peak Demand) to supply water to several communities around Ga- Masha, Ngwaritsi, Vergelegen, Mid Ngwaritsi, Leppellane, Nkadimeng, Schoonoord, Eerstegeluk, Spitskop, Mahlangu, Sephaku, Zaaiplaats, Annex A, Kalkfotein, Piet Gouws West and Piet Gouws East	Bulk Water Supply	1 350 000	January 2009	In 96 months
19.	Mooihoek/Tubatse Bulk Water Supply	Limpopo SIP 1 (Unlocking the Northern Mineral Belt with Waterberg as the Catalyst) SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Viable long-term augmentation of surface water from the Steelpoort River to villages and towns in the Greater Tubatse Municipality.13km of Steelpipe OD 660mm, reservoirs, gravity mains, treatment plants	Bulk Water Supply	807 000	November 2008	In 96 months
20.	Lebalelo Central & North Regional Water Supply	Limpopo SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	Water supply to 22,200 people. The local sources were investigated, the yield were not sufficient, and the quality was not fit for human consumption. The Implementation Ready Study proposed that raw water be obtained from the Lebalelo pipe line, purified at Mooihoek and distributed to Lebalelo South, Central and North (6 villages and Mafolo Park residential and commercial development comprising 5,719 units).	Bulk Water Supply	600 000	December 2013	In 60 months
21.	Magalies Water to Waterberg	Limpopo SIP 1 (Unlocking the Northern Mineral Belt with Waterberg as the Catalyst)	Feasibility	Regional Water Scheme will consist out of a new water treatment works at Klipvoor Dam in the North West Province and additional pipeline. This project must also serve Moretele West area.	Bulk Water Supply	1 891 000	June 2014	In 72 months
22.	Makhado West Regional Bulk Water Supply	Limpopo SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	The project is aimed at augmenting bulk water supply to the Makhado Wset area which includes Makhado, Sinthumule Kutama, the Louis Trichardt Air Force Base and its residential area, Braambos, which lies approximately 25km south-west from Makhado Town, the Sinthumule Kutama rural villages to the west	Bulk Water Supply	841 000	October 2014	In 60 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				of Makhado Town. The Vleifontein/ Elim area covers the bulk water supply for the 7 villages to the south-west of the Albasini Dam. Makhado West and Kutama Sinthemule be supplied from Nandoni Dam with offtake at Valdezia and that a wellfield at Bluegumspoort as a short term be developed.				
23.	Matoks Bulk Water Supply	Limpopo SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	Water supply to 87,200 people. Regional Bulk Transfer Scheme from Nandoni Dam with off take at Vuvani to supply 15 villages which is located approximately halfway between Polokwane and Makhado.	Bulk Water Supply	880 000	November 2013	In 84 months
24.	Nwamitwa Bulk Water Supply	Limpopo SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	Water supply to 244,500 people in 47,941 households. Regional Water Supply Scheme covers the rural area between the Groot Letaba and Molototsi rivers. Proposed that the Nkambaku Water Treatment Works be upgraded and extended, and pipe lines be constructed to 4 major command reservoirs from where it will be linked to existing distribution systems. Good indications of ground water has to be further investigated and explored. On the long term the Nwamitwa Dam has to be constructed upstream of the WTW.	Bulk Water Supply	644 000	June 2013	In 72 months
25.	Nzhelele Valley Bulk Water Supply	Limpopo SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	Water supply to 167,723 people in 32,504 households. Regional Water Scheme covers the area located in the mountainous upper Nzhelele valley on the slopes of the Soutpansberg northwest of Makhodo. The Implementation Ready Study proposed that the irrigation water from some 600 ha water logged irrigation fields be converted to primary water and that Musetzi Dam be raised. Water rights of commercial farmers downstream of Nzhelele Dam be purchased and converted to primary water.	Bulk Water Supply	600 000	May 2014	In 60 months
26.	Replacement Namakwa Bulk Water Supply	Northern Cape	Construction	The upgrading and replacement of the current bulk water infrastructure in the Namakwa Region.	Bulk Water Supply	530 000	April 2011	In 60 months
27.	Bulk water supply Van der Kloof - Vosburg	Northern Cape	Feasibility	Construction of a pipeline from Vanderkloof to Vosburg	Bulk Water Supply	450 000		
28.	Madibeng Bulk Water Supply	North West SIP 4 (Unlocking the economic opportunities in North West Province)	Construction	The proposed project scope of works entails the upgrading of the existing Water Treatment Works (60Ml) at Brits in Phase 1 by construction of an additional 20 Ml module to a total operating capacity of 80 Ml/day. Phase 2 of the project entails the design, and construction for certain sections of the bulk supply pipeline to Letlhabile; as well as improved abstraction works and the raw water supply pipeline to the Brits WTW and additional storage reservoirs that will supply the surrounding villages in the municipality.	Bulk Water Supply	500 000	September 2010	In 60 months
29.	Taung/ Naledi Bulk Water Supply	North West SIP 4 (Unlocking the economic opportunities in North West Province) SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The proposed project scope of works entails the refurbishment / upgrading of the existing Water Treatment Works (6Ml) at Pudumong in Phase 1. Phase 2A of the project entails the design, and construction of a new 8 Ml module. Phase 2B entails the construction of rising main and gravity main from Pudimoe WTW to Vryburg, including the construction of 3 reservoirs and 2 pump stations. Phase 2C of the project will entail the construction of gravity main from the Taung Dam to Taung WTW (to be constructed under Phase 2D). Phase 2D entails the construction of the Taung WTW, purified water pump station and improved pipe work to the current supply system in Taung. Phase 2E covers the construction of a new pipeline to a new command resevoir for supply to the south-eastern villages of Greater Taung LM.	Bulk Water Supply	733 754	January 2010	In 48 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
30.	Greater Mamusa Bulk Water Supply	North West SIP 4 (Unlocking the economic opportunities in North West Province) SIP 6 (Integrated Municipal Infrastructure Project)	Design	Development of ground water resources, supplemented by surface water abstracted from the Bloemhof Dam. This will include the upgrading of the abstraction works at the Bloemhof Dam, upgrading of the WTW at Bloemhof dam, bulk rising main from Bloemhof Dam to Schweizer-Reneke, including pump stations as required.	Bulk Water Supply	403 000	October 2012	In 48 months
31.	Pilanesberg North Bulk Water Supply	North West SIP 4 (Unlocking the economic opportunities in North West Province)	Design	The Pilanesberg Water Supply (North and South) is a joint venture between Magalies Water as the bulk water supplier in the region, Mines in the area and the Municipalities in terms of which each party would be responsible for its pro-rata costs of the PWS project based on water allocation to each participating party. It cosists of upgrading of the WTW at Vaalkop, various bulk water pipelines, pump stations and storage facilities for both the North and South schemes. Multi-facetted project: Extend capacity of Vaalkop Treatment Works, new pump station. PWS North: New bulk water pipelines frm Vaalkop Water treatment Works to Tussenkomst. Infrastructure includes new reservoirs at La Patrie and at Tuschenkomst. PWS South: New pipe line from Evergreen along the Elands river past Sun City to Ledig, Wesizwe and WBJV and a pipeline from there to provide water to Boshoek (in Rustenburg LM) and Xstrata.	Bulk Water Supply	1 176 000		
Small projects (cost less than R90 million per annum and not more than R250 million)								
32.	Graaf-Reinet Emergency Water Supply Scheme	Eastern Cape	Design	Camdeboo Local Municipality has taken the decision to upgrade the emergency bulk water scheme as a result of intermittent drought periods. When the dam is empty or the system is out of order, the Municipality needs to supplement the water supply to the town from the Emergency Wellfield also known as Damkamp. The population to be supplied with water is 7105 households with an estimated population of 35 525 people.	Bulk Water Supply	29 400	September 2012	In 36 months
33.	Sundays River- Paterson Bulk Water Supply	Eastern Cape	Design	Reservoirs at Ceasers Dam in Addo where the water is sourced • Upgrading of the Water Treatment Works (WTW) at Ceaser's Dam in Addo • Additional Clear Water Storage reservoir in Paterson • A rising main pipeline from the WTW at Ceaser's Dam, to the proposed clear water reservoir in Paterson. • Two proposed clear water pump stations will also be constructed.	Bulk Water Supply	80 210	March 2009	In 48 months
34.	Steytlerville Water Supply Scheme	Eastern Cape	Construction	Augment the bulk water supply to the town of Steytlerville by convanying surface water fron Erasmus Kloof.The town has completed its bucket eradication problem to 769 housholds and has constructed 590 RDP houses which need a more sustainable water supply.The project is planned to cater for 7,189 people.	Bulk Water Supply	70 000	September 2012	In 32 months
35.	Mncwasa Bulk Water Supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Construction	There are 62 rural coastal type villages with an estimated population of 36 742 persons in 6 124 households. Poverty levels are extremely high with unemployment at over 80% and some 90% of families (average size 6) surviving on less than R 620 per month. The regional bulk component of the proposed water supply scheme is as follows: Construction of the Mndwaka Dam - The proposed dam (category II) is a multiple arched dam supported by downstream buttresses and is to be constructed out of rubble masonry concrete with a central free overflow spillway with an ogee crest. Outlet works consists of a 300mm dia. Ductile Iron pipe with	Bulk Water Supply	264 188	February 2010	In 48 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				Mortar lining, encased into one of the abutments, with upstream cut-off valves situated at three different draw-off levels. Construction of a pump station and a 1 km long raw water pumping main (250mm dia) from the Mndwaka Dam to the proposed water treatment works. Construction of a new 2.5ML water treatment works, including a 5.5 Ml balancing dam and high lift pump station. Construction of a 12.5 km long rising main (200mm dia) from the water treatment works to the main storage reservoir. Construction of a 5 Ml reinforced concrete bulk storage reservoir.				
36.	Xhora East Bulk Water Supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The project area is situated in the Eastern Cape north east of the Mbashe River in the former Transkei region and covers Elliotdale Magisterial District, locally known as Xhora. The area covers approximately 557 km² in extent with 133 rural villages. The population totals 66 931 persons in 11 115 households with about 94% of the households earning less than R1 500 / month.There is a possibility of a cross border supply with O R Tambo DM	Bulk Water Supply	258 541	August 2009	In 36 months
37.	Ibika Water supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The project is to supply a number of villages in the Centane area in the Mnquma Local Municipality area. The primary focus of this project is to make potable water services available to the residents of the project area by means of providing bulk water services. The present source of water supply in Ibika rural is mainly harvested rainwater, springs, streams, small dams and the Upper Kobonqaba and the Qora Rivers. In Centane town there is a water supply scheme relying on groundwater sources. The proposed Ibika-Centane scheme will use the existing concrete storage reservoirs at Ibika which are favourably located to supply the areas under gravity flow. The source of water for the Ibika reservoirs is treated surface water from Gcuwa Treatment Works in Butterworth. The project will serve 48 172 beneficiaries in 9 167 households.	Bulk Water Supply	49 000	September 2009	In 36 months
38.	Tsomo RDP2 Northern	Eastern Cape	Complete		Bulk Water Supply	22 250	Complete	Complete
39.	Chris Hani District Municipality Cluster 4 Bulk Water Supply (Ncora Zone B)	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Abstraction from Doringrivier Dam, Ncora Dam and borehole development to supply water 24,320 households, 155 schools and 18 clinics in the Sakhisizwe and Intsika Local Municipalities. Out of the 205 communities, 40 communities with 54,763 people (inclusive of Cala Town) have provision of a basic water service which provides a quantity of 25 ℓ/cap/day within a nominal walking distance of 200m, however, most of the communities have an unsustainable water source. The balance of the communities i.e. 165 with 79,000 people rely on water from open springs, streams, stock dams and limited supply from roof run-off. Also located within the communities are schools and clinics, the former generally having no supply of water. These communities live in a rural environment where the community is spatially located in rural villages on plots of approximately 2500m².	Bulk Water Supply	353 914	July 2010	In 60 months
40.	Chris Hani District Municipality Cluster 6	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Ngcobo Cluster 6 comprises an estimated 125 villages with some 6,369 households and 38,214 inhabitants. The Bulk Supply is designed to have two abstraction points, one on the Ngancule River and one on the Mbashe River. The two abstraction points will be used to provide water to nine subschemes for all 6,369	Bulk Water Supply	324 000	June 2010	In 72 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				households situated in the Engcobo Local Municipality				
41.	Chris Hani District Municipality Cluster 9 Bulk Water Supply (Quthubeni Bulk Water Supply)	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Provide bulk water to settlements in the Intsika Yethu-, Amathali- and Mnquma Local Municipalities. The project area is approximately 20km Southwest of Tsomo Town along the R352 road between Tsomo and Stutterheim. This locality is above and north of the confluence of the Tsomo and Great Kei Rivers and is characterized by steep rugged terrain with elevations ranging from 1 200m on the high ground to 260m at the rivers confluence. Phase one of the project, will be implemented, which is supplied from the Jojweni command reservoir fed by the Tsojana infrastructure. Bulk pipelines and reservoirs will be sized and constructed to ensure sufficient availability of water to all 30 821 people in 5 137 households. Phase 2 and further phases, will obtain supply from the Tsomo River, which include Clear Water Storage, Pump Station and a Pipeline linking Tsomo existing works to existing Tsojana Southern Bulk. Upgrading of Tsomo Town WTW to 4.5Ml/day, Construction of Xolobe Bulk Pipeline, Construction of pump station to supply Xolobe Reservoir, Construction of Xolobe Command Reservoir, and Upgrade Existing Southern Bulk line to full capacity.	Bulk Water Supply	196 000	August 2010	In 48 months
42.	Xonxa Dam water supply to Lukhanji	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Construction	This project aims to augment bulk water supply to Queenstown, who is currently experiencing water shortage. Water is being over abstracted from the Waterdown dam which is the Main supply source. The pumping main from Waterdown is also in a critical condition with significant water leaks. The other dam, Bongola which is considerably smaller, is experiencing reduced capacity as a result of over siltation of the dam and therefore limiting the abstraction. Pump the full available surplus of 18.27 Ml/day from Xonxa Dam to Berry Reservoir in a single stage. The pumping station located at Xonxa Dam and a balancing pressure tank (BPT) is proposed at the termination point at Nonesi' s Nek with residual pressure. The water will gravitate from BPT to Berry Reservoir. Centralise treatment at Queenstown (Berry) water works. Pump potable water back to supply the Macibini Villages and Ilinge with water. The total population that will benefit from this project is 172,500 people, which includes Queenstown, Mlungisi, eZibeleni, Macibini Villages and Ilinge, and in addition business and industry in Queenstown.	Bulk Water Supply	443 998	January 2012	In 42 months
43.	Hofmeyer Ground Water Supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Construction	This project aims to augment bulk water supply to Hofmeyr, which is currently relying on deminishing groundwater availability in its immediate vicinity. The aim is to draw this supply from additional ground water sources furtherafield. This project will supply water to Hofmeyer and will benefit 12,279 people in 3,013 households.	Bulk Water Supply	64 000	September 2009	In 26 months
44.	Middelburg Ground Water Supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Construction	This project aims to augment bulk water supply to Middelburg, which is currently relying on deminishing groundwater availability in its immediate vicinity. The aim is to draw this supply from additional ground water sources furtherafield. This project will supply water to Middelburg and will benefit 46,200 people.	Bulk Water Supply	22 000	January 2011	In 12 months
45.	OR Tambo Mthatha Bulk Water Intervention	Eastern Cape	Complete		Bulk Water Supply		Complete	Complete
46.	Coffee Bay Bulk Water Supply	Eastern Cape	Complete	Pump station, Rising main, Regional water storage reservoir,	Bulk Water	94 000	Complete	Complete

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
		SIP 6 (Integrated Municipal Infrastructure Project)		Gravity mains to village reservoirs, Village reservoirs, Break pressure tanks, Valve chambers, Power line to pump station	Supply			
47.	Matatiele Bulk Water Supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Design	The development of four well-fields north and north west (Kinira Valley) of Matatiele. The approach is to develop the well-fields in phases as the water demand grows. The total potential supply from the four well-fields is estimated to be about 8 400 m3/day. Further expansion of the well-field system would be possible to the west of Well-field No 4. The total population that will benefit from this project is 36,644 beneficiaries.	Bulk Water Supply	182 000	November 2012	In 18 months
48.	Mount Ayliff Bulk Water Supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The proposed Siroqobeni River Dam is located 9.5km from Mount Ayliff. The dam site is in the core of a narrow valley, which opens a short distance of the site from mountainous terrain into a large open pediment valley floor. The main advantage of this dam site is that it is located reasonably close to Mt Ayliff and it would be a gravity supply scheme through a bulk supply pipeline to the current municipal bulk water network, and would not require extensive pumping. A water treatment works, pump station and reservoir is also included in the scheme. The total population that will benefit from this project is 78 081 beneficiaries	Bulk Water Supply	183 000	July 2012	In 60 months
49.	Alfred Nzo Bulk Water Supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	Alfred Nzo Upgrade/ Refurbishment of 6 existing plants and downstream infrastructure (Amatola Water Board)	Bulk Water Supply	500 000		
50.	Alfred Nzo (Mount Frere) Bulk Water Supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	The proposed Mkemane River Dam is located approximately 35km due north of Mount Frere and would require some 56km of bulk pipeline of which 50km is gravity fed in order to reach Mount Frere. The scheme will include a water treatment works, pump stations, reservoirs and access roads. The total population that will benefit from this project is 177 566 beneficiaries	Bulk Water Supply	432 800	April 2015	In 60 months
51.	Nahoon Dam / East Coast Bulk Water Supply	Eastern Cape	Feasibility	BCMM has a services backlog that has led to an inability to service a housing backlog of 75,000 units. Of this backlog, an estimated 40,000 units are in the East London area. There are settlements with unacceptably high densities of informal housing with attendant services backlogs, with no opportunities to relieve densities. Furthermore, there are rural settlements in BCMM near the East London node that are reliant on very low yielding borehole systems.	Bulk Water Supply	150 000	June 2013	In 60 months
52.	Misgund Bulk Water Supply	Eastern Cape	Feasibility	The project will plan for the construction of a water treatment works and bulk pipeline for the town of Misgund in the Koukamma Local municipal are. It has also been proposed that ground water should be considered as the first option. The project has been approved for a feasibility study.	Bulk Water Supply	7 173	January 2014	In 24 months
53.	Ikwezi Bulk Water Supply	Eastern Cape	Feasibility	The current water supply to the towns of Jansenville, Waterford and Klipplaat is insufficient to cater for the demand and Ikwezi Municipality's ageing infrastructure is in desperate need of upgrades and repairs. The objective of the proposed Ikwezi Bulk Water Supply Scheme is to ensure long term sustainable bulk water supply that will allow for socio-economic development. People to be served by the project are 4367 people.	Bulk Water Supply	128 000	June 2013	In 24 months
54.	Kirkwood Water Treatment Works	Eastern Cape	Feasibility	The Kirkwood area has experienced a substantial growth of population recently in terms of housing developments. Significant pressure on the existing bulk water infrastructure due to the	Bulk Water Supply	20 500	April 2013	In 36 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				provision of bulk infrastructure services to the new communities. These settlements have recently been converted from VIP latrines to full water borne sanitation. The municipality experiences water scarcity challenges during maintenance periods of the Irrigation Water Board. The infrastructure is being maintained for up to 4 days, whereby water is closed.				
55.	Idutywa East Bulk Water Supply Scheme	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	The objective is to provide bulk domestic water supply to the communities in the Idutywa East area to RDP standards of at least 25 l/capita/day and their will be 32,943 beneficiaries (6 589 households) residing in 30 villages. There is no functional potable water supply infrastructure in Idutywa East. Residents obtain their water from nearby streams or rivers. Some hand-pumps do exist, but seems to have fallen in disrepair.	Bulk Water Supply	100 000	September 2015	In 36 months
56.	Sudwana Water Supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	Water supply to 69,500 beneficiaries in 11,853 households in the Sudwana area as well Nqabara North and South, Mhlohlosi and Mendu. Sundwana area, in Amathole District Municipality (ADM), is situated in the Willowdale Magisterial District, on the west bank of the Mbashe River in the region of Collywobbles. The area is approximately 28km from Dutywa towards the coast. The Nqabara River flows from Dutywa in a north easterly direction to the coast, and the proposed dam site is located about 15km from Dutywa in the Nqabara River.	Bulk Water Supply	173 000	May 2013	In 36 months
57.	Ngqamakhwe Water Supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	The project area, covering 1198 km², is situated within the Mnquma Local Municipality as part of Amathole District Municipality, Eastern Cape. There are about 170 rural villages with a population of about 83 700. The objective is to provide bulk domestic water supply to the communities in the Ngqamakwe area to RDP standards of at least 25 l/capita/day.	Bulk Water Supply	490 000	October 2013	In 30 months
58.	Ntabankulu Bulk Water Supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	A Regional Bulk Water Supply Master-planning assignment was completed for Ntabankulu Municipality in 2010. As a result there is now a need to continue with a feasibility study for the projects identified, progressing towards implementation readiness.	Bulk Water Supply	245 000	January 2014	In 48 months
59.	Great Kei Basin Regional Water Supply	Eastern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	Water supply to 50,000 people in the Komga in the north west, settlements from Kei Mouth in the north to Kwelerha Point in the south including the communities of Mooiplaas and Kwelerha in between. The improvement in potable water supply will improve general standard of living with a reduction in water borne diseases.	Bulk Water Supply	523 000	April 2015	In 60 months
60.	James Kleynhans Bulk Water Supply		Feasibility	The total current population within the Grahamstown area is 134,991 of which 112,091 are indigent. In terms of water supply, the area is divided into two supply zones namely East (James Kleynhans WTW) and West (Waainek WTW with support from James Kleynhans WTW). The total current population per supply zone is West; 27,948 people and East; 107,043. All future low cost developments that are planned are in the high lying areas and can only be fed from the James Kleynhans Scheme.	Bulk Water Supply	68 000		
61.	Jagersfontein / Fauresmith Bulk Water Supply Phases 1-3	Free State SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The bulk water supply project falls within the Kopanong Local municipality area of jurisdiction. The Jagersfontein/Fauresmith Regional Bulk Water project will provide bulk water to Jagersfontein and Fauresmith from Kalkfontein Dam. The project will further supply to be revitalised De Beers Diamond mine in Jagersfontein and this is expected to provide job opportunity spin offs once phase two of the project is complete. The project is	Bulk Water Supply	250 000	September 2007	In 84 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				divided into two phases. Phase one covers the construction of a 2Ml/d water treatment works at Jagersfontein, a raw water storage dam, a 43km of 400 diameter UPVC pipe line and GRP in some sections, two pump stations and upgrading of the storage dam reservoir. This phase is under construction and is due for completion in October 2010. Phase two of the project is considered to be very important as it will reduce the water demand from the Kalkfontein dam by providing water from the Vanderkloof Dam. This will be achieved by extending the Oranje-Riet and Kalkfontein Canal infrastructure.				
62.	Mohokare Bulk Water Supply	Free State	Construction	Water supply to 39,556 people in 7607 households. Water supply pipelines for Smithfield from the Caledon River and for Rouxville and Zastron from the Orange River. Phase 1 of the project is to supply water to Rouxville and phase2 will supply bulk water to Smithfield and Zastron.	Bulk Water Supply	161 000	October 2011	In 36 months
63.	Masilonyana Bulk Water Supply	Free State	Design	Water supply to population of 23,443 in Theunissen, 14,852 in Winburg, 14,269 in Brandfort, 2,751 in Soutpan and 2,210 in Verkeerdevlei. The proposed scope of work aims at providing sustainable supply and storage facilities to these towns with urgency in Verkeerdeevlei. The raw water supply bulk line between Theunnisen and Brandtfort will be prioritised as its currently experiencing 40% water losses.	Bulk Water Supply	150 000	August 2012	In 36 months
64.	Tokologo Regional Water Supply Phase 1	Free State	Construction	Provision of water supply to Hertzogville from Christiana comprising of abstraction works from the Vaal River, raising main, 2 pump stations, water treatment works, 2 clear water storage reservoirs and 1 raw water storage. Option considered for Phase 2 of provison of water from Kimberley at the Riverton abstruction works to Boshof and Dealesville. A 2Ml/d WTW will be constructed in Boschoff.The project will serve 9,388 beneficiaries in 2,236 households with water.	Bulk Water Supply	250 000	July 2010	In 60 months
65.	Setsoto Bulk Water Supply	Free State	Design	Water supply to 130,313 people in 32,746 households. Repair and refurbish the two water treatment plants for senekal, install additional storage reservoir capacity to 1.8ML, upgrade Old Senekal Water Treatment Plant with 6Ml/d, increase Sandspruit Weir height, upgrade pumping mains. Construct new Rosendal Dam to feed into the Meulspruit Dam to augemnt raw water supply for Ficksburg, Clocolan, and Marquard. Construct raw water storage dam in Ficksburg and link the Caledon river with Meulspruit dam for water resource planning and explore and develop groundwater resources for all 4 towns.	Bulk Water Supply	160 000	October 2012	In 48 months
66.	Dihlabeng Bulk Water Supply	Free State	Construction	Water supply to 9,296 people in 2315 households. Groundwater development for both towns will be maximised, after which water will be supplied from the Morelig Reservoir to Paul Roux including Fateng-Tse-Ntsho and Rosendal. During winter months the boreholes have proved not to be a reliable source and on rainy days, the water would have high levels of tibidity and Manganesse. DWA had to assist the municipality on a continuous basis to supply water by means of tankers as alternative supply of drinking water.	Bulk Water Supply	150 000	October 2011	In 42 months
67.	Nketoana Bulk Water Supply	Free State	Tender	Water supply to 62,363 people in 14,905 households. Petrus Steyn and Mamafubedu - construction of a rising main from Reitz Water Treatment Works (RWTW) to Petrus Steyn, and the upgrading of the RWTW to 279 l/s, a new pump station and a	Bulk Water Supply	304 000	November 2012	In 60 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				reservoir. Lindley and Ntha - 25 boreholes within a 10 km radius, supply lines, pump stations and a reservoir. Arlington and Leratswana - 8 boreholes within a 10 km radius, supply lines, pump stations and a reservoir.				
68.	Sterkfontein Dam Scheme	Free State	Construction	Bulk water supply to the rural Qwaqwa areas being Kerstell, Tsiame, Phuthaditjhaba, Tshiame, Makgolokweng & Diatalawa Settlements. The bulk water supply project falls within the Maluti a Phofung Local municipality area of jurisdiction within the district Thabo Mofutsanyane district. It is devided into two phases. The first phase of the project scope is comprising of 3Ml/d Water Treatment Works, 3Ml Storage Reservoir and a pumping mains 6,6 km. Phase 2 of the project, entails the construction of a 45 km pipeline, 3 x 2ML/d reserviors to the rural areas of Qwaqwa & supply to Kerstel which is in construction.The second phase will also include the Mechanical and Electrical equipping of the water treatment plant.	Bulk Water Supply	330 000	September 2007	In 60 months
69.	Phumelela Bulk Water Supply	Free State	Construction	Water supply to 12,739 people in 2,690 households. The objective is to implement a sustainable regional bulk water supply scheme in the Phumelela Municipal area, specifically for Warden as Phase 1. The town is currently using boreholes for water supply which are not having good yields versus the demand. Warden has suffered severly in winter season and summer season as their raw water storage dam has no storing capacity due to silting. The proposed scope of works will be a rehabilitation of an existing dam.	Bulk Water Supply	125 000	November 2011	In 36 months
70.	Moqhaka regional water scheme	Free State	Design	Water supply to a population of 7,858 in Steynsrus, 28,469 in Viljoenskroon, and 85,378 in Kroonstad The objective is to implement a sustainable regional bulk water supply scheme in the Moqhaka Local Municipal area, specifically for Steynsrus, Kroonstad and Viljoenskroon. Steynsrus is currently supplied from Vals river upstream which runs dry during certain seasons of the year and the water would have to be transported from Kroonstad. The proposed scope of works includes Vals River Intake Works and Pump Stations and storage facilities. Viljoenskroon is currently supplied from Vaal and Rhenoster Rivers. Rhenoster river frequently runs dry then Vaal is a backup source. Proposed scheme includes rising main from Vaal to Rhenoster river then to Viljonskroon, and Pump station. Kroonstad is currently served from Vals river with a town of Maokeng supplied from boreholes. The proposed scope of work includes ground water supply in Kroonstad as an immediate solution with further development of a long term solution to sustain storage of the Vals river through storage facilities.	Bulk Water Supply	230 000	January 2013	In 60 months
71.	Ngwathe Bulk Water Supply	Free State	Complete		Bulk Water Supply	11 300	Complete	Complete
72.	Ngwathe Bulk Water Supply Phase 2	Free State	Feasibility	Ngwathe Local Municipality has five towns namely Parys, Heilbron, Koppies, Vredefort and Edenville. The municipality has prioritized Edenville to have a bulk water supply project in view of the water shortages facing the town. Edenville has 1797 households and a population of 6974. The water demand is 1,35Ml/day which is projected to increase to 2,14Ml/day in 2030. The town currently has a ground water based water supply and the project proposes to connect it to Heilbron to access the Rand	Bulk Water Supply	160 000	October 2013	In 48 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				Water Supply System. The project will comprise rising mains pump stations and increasing storage capacity in Edenville.				
73.	Letsemeng-Petrusburg-Koffiefontein Bulk Water Supply	Free State SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	Letsemeng Local Municipality has 5 towns namely Koffifontein, Petrusburg, Jackobsdal, Oppermansgronde and Luckhoff. The municipality has prioritized Koffifontein and Petrusburg. Koffifontein has 3472 households and a population of 11714. Its current water demand is 3,89Ml/day which is projected to increase to 6,2 Ml/day in 2030. The project comprises upgrading the raw water intake from the Kalkfontein Dam and the Orange Riet canal supplied by the Vanderkloof Dam. The water treatment plant, rising mains and storage reservoirs are also to be upgraded. Petrusburg has 2029 households and a population of 72351, the current water demand is 0, 7 Ml/day and is projected to increase to 1, 4 Ml/day in 2030. The project comprises increasing ground water development, borehole equipping, upgrading rising mains water treatment and storage reservoirs. It is also intended to make use of the Modder river, the lower reaches of Krugersdrift Dam for a surface water supply scheme.	Bulk Water Supply	90 000	August 2013	In 48 months
74.	Naledi Bulk Water Supply	Free State SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	The Naledi Bulk Water Supply Project comprises providing water to the towns of Dewetsdorp, Wepener and Van Stadensrus. Dewetsdorp and Wepener have been included in the upgrading of the Greater Bloemfontein area. The proposed bulk project is for upgrading Van Stadensrus Water Supply. Van Stadensrus has 417 households and a population of 1424. It is currently consuming 0.17Ml/day and the 2030 water demand is 0,27Ml/day. The project will comprise exploiting the local surface and ground water resources before considering a connection to Wepener. Therefore the project will comprise exploration and development of ground water, equipping boreholes, installation of rising mains, disinfection and increasing the clear water storage. Upgrading the existing package water treatment works based on Van Stadensrus Dam will also be undertaken before connecting to Wepener on the Bloemfontein Water Supply System.	Bulk Water Supply	140 000	September 2013	In 48 months
75.	Mantsopa Bulk Water Supply	Free State	Feasibility	Mantsopa Local Municipality has five towns namely Ladybrand, Hobhouse, Tweespruit, Excelsior and Thaba Patchoa. The towns of Ladybrand, Hobhouse Tweespruit and Excelsior are facing a water shortage. The town of Excelsior is currently connected to Thaba Nchu and is being upgraded through the Bloemwater system. Ladybrand has 5897 households and a population of 21974 and is currently using 6.1Ml/day to be upgraded top 10.2 Ml/day. Hobhouse has 1212 households with a population of 4185 is using 0.15Ml/day to be upgraded to 0.7Ml/day. Tweespruit has 1365 households, a population of 5140 and is currently using 1,7Ml/day to be upgraded to 1,9Ml/day. The project will comprise upgrading the Ladybrand Water supply to accommodate Tweespruit and Hobhouse. This will involve upgrading the Caledon River intake works, water treatment plant, rising mains and storage reservoirs.	Bulk Water Supply	250 000	October 2013	In 60 months
76.	Tswelopele Bulk Water Supply	Free State	Feasibility	The bulk water project will involve upgrading the bulk water supply infrastructure for Builtfontein and Hoopstad. Hoopstad has 3588 households and a population of 14 524. The water demand currently stands at 4,9Ml/day and is to be upgraded to 6,3ML/day. Builtfontein has 5352 households and a population of	Bulk Water Supply	85 000	July 2013	In 30 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				20801. The water demand is 6, 4 Ml/day and needs to be increased to 9, 7 Ml/day. Both towns abstract water from the Sand Vet system comprising the Erfenis Dam, Allemanskraal Dam, Sand river and a canal system. The raw water abstraction, rising mains, water treatment works and storage reservoirs are to be upgraded to meet the 2030 water demand.				
77.	Mhlabatshane Bulk Water Supply	Kwazulu-Natal SIP 3 (South Eastern node & corridor development) SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The Mhlabatshane project is located in the Ugu District Municipality (DM) and will serve people in the Umzumbe and Hibiscus Coast Local Municipalities (LM). The intention of the Mhlabatshane Project is to provide 101,062 people with an assured supply of potable water. The scheme will cover ten Tribal Authority areas and forty nine tribal wards. The Bhekani, Nhlangwini, Mabheleni, Hlubi, KwaCele 1, KwaCele K, Qwabe P and Frankland areas are located within the Umzumbe LM while the areas of Shabeni and KwaMadlala may be found in the Hibiscus Coast LM. This project forms part of the Ugu DM's Water Master Plan.	Bulk Water Supply	483 482	January 2011	In 40 months
78.	Malangeni Waterborne Sanitation	Kwazulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Complete		Waste Water Services	7 187	Complete	Complete
79.	Greater Eston Water Scheme	Kwazulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Construction	This project is for the supply of water to the Greater Eston area (± 300 km2 in extent), situated some 40 km south-west of Durban and includes Wards 4, 5, 6, and 7 of Mkhambathini (KZ226) and Ward 5 of Richmond (KZ227) Local Municipalities. The proposed design takes possible future extensions into account, with provision also made for supplying water to Ugu and Sisonke District Municipalities. The area of supply covers a total of 81 villages. A few of the villages have existing, but unreliable basic levels of service, and will be incorporated into the bulk supply provision from this project.	Bulk Water Supply	296 261	November 2011	In 36 months
80.	Driefontein Complex Bulk Water Supply	Kwazulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The Driefontein Complex Bulk Scheme is a Regional Bulk Water scheme infrastructure for the Emnambithi rural area to serve the needs of the people residing in Driefontein Complex area. The regional project will cater for the extended bulk water supply to neighbouring areas such as Matiwaneskop, Cemin and Steincoal Spruit, including possible supplementary supply to the existing Olifantskop Regional Water Scheme located in the Indaka LM area of the Uthukela DM.	Bulk Water Supply	176 101	August 2011	In 48 months
81.	Greytown Regional Bulk Scheme	Kwazulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Greytown Bulk Water Scheme Phases 1 & 2 covers the town of Greytown and Enhlalakahle (parts of Wards 7, 9, 10 & 11) as well as the settlement of Kranskop to the east. The project area comprises a mixture of high, medium and low income urban settlement, business and light industry. It will supply some 50,707 people of Enhlalakahle and Greytown with a total demand of 12,8 ML/d (peak week daily design flow). The scheme will serve approximately 8,450 households with bulk and a further capacity to extend the bulk infrastructure. The supply of potable water in Greytown has been substantially inadequate for some time. In addition this restriction is preventing the future development of Greytown.	Bulk Water Supply	950 000	April 2009	In 60 months
82.	Emadlangeni Bulk Regional scheme	Kwazulu-Natal SIP 6 (Integrated Municipal	Construction	The provision of a bulk supply pipeline between Newcastle and Utrecht to provide east of Newcastle including Madadeni,	Bulk Water Supply	50 301	September 2009	In 40 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
		Infrastructure Project)		Osizweni and Amantungwa where significant settlement growth has occurred. The proposed project will utilise the existing 18km steel pipeline from the Buffalo River to Utrecht by connection of a new gravity main from the Braakfontein reservoirs. Two reservoirs, two balancing tanks and two pump stations will also be developed.				
83.	Mandlakazi Bulk Water Supply	Kwazulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Provide bulk water supply to the Mandlakazi tribal area (all inclusive) except for a small portion in the south, which is to be served via the Usuthu Regional Scheme. This project had obtained Special Municipal Infrastructure Fund (SMIF) funding approval and forms an integral part of the ongoing rollout of the Mandlakazi Regional Water Supply Scheme (RWSS). The scheme will serve households with bulk and reticulation networks and a further capacity to extend the bulk infrastructure. The total demand for both Mandlakazi and Hlabisa areas is 7,26 mil m3/annum.	Bulk Water Supply	206 110	November 2008	In 48 months
84.	Nongoma Bulk Water Supply	Kwazulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Nongoma Bulk pipeline and associated infrastructure forms part of Usuthu RWSS Master Plan supplying water to Vukwane Dam that supplies the town of Nongoma and surrounding communities.	Bulk Water Supply	215 000	February 2010	In 42 months
85.	Dukuduku Resettlement Bulk Water Supply	Kwazulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The project entails the provision of water supply needs for 3 communities within the Dukuduku on-site resettlement project. The three community areas are Khula village, Dukuduku and eZwelisha areas. Further, a bulk pipeline from Mtubatuba to St. Lucia to feed the three identified areas is also envisaged. The achievement of the above objectives is based on a feasibility study that will help provide for appropriate and sustainable water supply options for the area.	Bulk Water Supply	266 382	July 2011	In 36 months
86.	Hlabisa Regional Bulk Water Supply	Kwazulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Provide bulk water supply to the tribal authority areas of Mdletshe (western portion), Hlabisa Abasempembeni and Hlabisa Abakwahlabisa. It will supply some 51,431 people in Hlabisa area and 18,606 people in Ezibayeni area of Hlabisa Local Municipality as well as the town of Hlabisa with a total demand of 4.17 ML/d. The scheme will serve households with bulk and reticulation networks and a further capacity to extend the bulk infrastructure. There are a number of existing schemes within the Hlabisa Local Municipality area, some functional and some dysfunctional. The scheme was designed to maximize the use of the existing infrastructure, and designed further to connect onto existing water schemes available so as to provide an adequate supply of bulk water for distribution to the communities of Hlabisa.	Bulk Water Supply	155 855	February 2009	In 48 months
87.	Middledrift (Nkandla) Regional Bulk Scheme	Kwazulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Raw water will be received from the Madungela Plant through the 800mm transfer pipeline. The new waterworks will be adjacent the existing package plant about 100m west of Mkhalazi Pumpstation. The reticulation areas get water from various sources such as boreholes and springs. However in SSA1 all areas already covered get water from the package plant near the Mkhalazi pumpstation. The recent extensions done under SSA1, SSA2 and SSA3 have now rendered the plant inadequate	Bulk Water Supply	431 232	June 2011	In 13 months
88.	Greater Bulwer Donnybrook Water Scheme	Kwazulu-Natal SIP 6 (Integrated Municipal	Construction	Water supply to Gala, Woshi, Gqumeni, Isigodi Esikhulu, Jokweni, Okhetheni, Hlabeni, Qulashe, Mnqundekeni and Nglesheni	Bulk Water Supply	133 638	January 2013	In 48 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
		Infrastructure Project)						
89.	Ngcebo Bulk Water Scheme	Kwazulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The Ngcebo Water Treatment Plant (WTP) is an addition to the existing scheme which was impaired in 2011. The WTP has a capacity of 0.5Ml/d. The current demand from the WTP is at or near this capacity. Additional reticulation at Ngcebo will increase this demand even further. In addition, the existing WTP is a package plant with associated operational deficiencies. It is now proposed to construct a new 1.5Ml/d WTP at Ngcebo to replace the package plant and to provide additional capacity to serve the rural areas of Ngcebo. The upgrade to the WTP will provide an increased assurance of supply to the rural consumers at Ngcebo as well as providing the supply necessary to serve other backlog areas which will be reticulated by Ilembe at Ngcebo	Bulk Water Supply	21 888	September 2011	In 60 months
90.	Maphumulo Bulk Water Supply Ph 1 and 2	Kwazulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Maphumulo BWS Scheme phase 1.1A comprises the construction of a temporary abstraction from the Imvutshane River, a raw water delivery main, a raw water pump station, the raw water rising main and a new 6Ml/day water treatment works. Phase 1.1B comprises the construction of a pump station adjacent to the Water Treatment Works built under phase 1.1A, a rising main together with appurtenant pump stations and reservoirs to a 500KL command reservoir situated in the vicinity of Maphumulo and pumping from there to a new 1000KL command reservoir at Masibambisane and a gravity main to the Maphumulo Hospital. Maphumulo phase 1.2 will compirise bulk water transfer from the booster pump station built under phase 1.1B via a 15km steel and uPVC 3-stage rising main (350mm -200mm dia.) to the existing Maqumbi command reservoir together with 2 no. pump stations and a 1Ml reservoir. Maphumulo phase 1.3 will comprise a 10 km 160mm dia. Steel and uPVC gravity main feeding from the Maqumbi command reservoir to the Ashville reservoir. Maphumulo Ph 2 will be the construction of the Imvutshane dam and raw water supply to the pumpstation.	Bulk Water Supply	159 145		
91.	Greater Mpofana Bulk Water Supply	Kwazulu-Natal SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	This project will be devided into two different phases. The current budget will only cover phase one that consists of 20Ml/day Rosetta Water Treatment Plant (RWTP) with a 10Ml portable water storage reservoir in close proximity to the right hand flank of the Spring Grove Dam wall. From this reservoir, separate pump sets are required to feed a 1Ml reservoir in Rosetta, 12 Ml reservoir in Bruntville and 10Ml reservoir in Nottingham. It will also include DN500 12Km long Steel Pipeline from Rosetta Water Treatment (RWTP) to Bruntville and Rosetta, DN 650 8Km long HDPE pipeline from RWTP to Nottingham Road.	Bulk Water Supply	110 147		
92.	Groblersdal Lukau BWS	Limpopo SIP 6 (Integrated Municipal Infrastructure Project)	Complete		Bulk Water Supply	32 154	Complete	Complete
93.	Giyani Bulk Water Supply Drought Relief	Limpopo SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The project is to solve the extreme water shortages problem that is currently being experienced by communities in areas which are relying on water supply from the Middle Letaba Dam (and smaller Nsami Dam) due to the drier period at the catchment area. The raw water will be extracted from Nandoni dam to Nsami dam in Giyani.	Bulk Water Supply	252 000	November 2010	In 42 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
94.	Olifantspoort WTW	Limpopo SIP 6 (Integrated Municipal Infrastructure Project)	Complete		Bulk Water Supply	218 000	Complete	Complete
95.	Specon BWS	Limpopo SIP 6 (Integrated Municipal Infrastructure Project)	Complete		Bulk Water Supply	73 000	Complete	Complete
96.	Mametya Sekororo Bulk Water Supply	Limpopo SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Construction of a 15ML/Day Water Treatment Works at the Oaks/ Willows. Construction of a 1,6 km rising main pipeline to connect to the Oaks. Construction of 1,2 km rising main pipeline to the Willows. Construction of one command reservoir with the capacity of 15ML and two substantial storage reservoirs, 400kl and 200kl respectively.	Bulk Water Supply	214 000	November 2012	In 48 months
97.	Sinthumule Kutama Bulk Water Augmentation	Limpopo SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The project entails the Bulk Water Supply (BWS) for Makhado, Sinthumule/Kutama, the Louis Trichardt Air Force Base (AFB) and it's residential area, Braambos, which lies approximately 25 km South-West from Makhado town (formerly Louis Trichardt), the Sinthumule/Kutama rural villages to the west of Makhado town and Makhado town which includes all extensions in Makhado town, Tshikota and the Kutama Sinthumule Maximum Security Prison. The proposed connector lines from the Nooitgedacht boreholes to the proposed future balancing tank and pumping station at Nooitgedacht. Ground water will be pumped from Nooitgedacht pumping facility to Mowkop reservoir to supply Makhado town and extensions with additional water. The proposed pumping station and balancing tank at Nooitgedacht will be designed to ultimately supply water from Nandoni Water Treatment Works to Zones A,B,C and the Louis Trichardt Air Force base. The pumps designed for the ultimate scheme at Nooitgedacht will be utilized to pump to Mowkop reservoir from the Nooitgedacht boreholes for the interim solution. The Nooitgedacht boreholes will supply water to Mowkop for the interim scheme but will only be used as standby supply to Sinthumule/Kutama and the AFB for the ultimate scheme.	Bulk Water Supply	455 000	January 2007	In 96 months
98.	Moutse Bulk Water Supply	Limpopo SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Contract1: Upgrating of Groblersdal Water Treatment works by additional 18ML. Contract 2: Construction of 6.5km, 500 mm dia pipeline from Groblersdal WTW to the existing 10ML reservoir outside Groblersdal tow. Contract 3: Construction of 29.857 km 600mm dia pipeline from Groblersdal Reservoir to the proposed 10ML new reservoir at LusakaContract 4: Construction of 250mm dia 6.676km long branch pipeline. Contract 5: Construction of 60.720km, 400mm dia long gravity main from Lusaka reservoir to Moutse West. Contract 6: Construction of 10ML Lusaka reservoir. Contract 7: Construction of Groblersdal West pump station.	Bulk Water Supply	560 000	February 2012	In 36 months
99.	Glen Alphine Bulk Water Supply	Limpopo SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	Water supply to 137,000 people in 24,400 households. The Regional Water Scheme comprises abstraction of unused irrigation raw water from an existing outlet at the Glen Alpine Dam, raw water pumping to a water purification works above the dam, an 11km clear water pump main to a system command reservoir, a 44km gravity main from there to Senwabarwana from	Bulk Water Supply	345 000	September 2014	In 60 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				where terminal pumping would deliver water 6.5km distance at the terminal reservoir above the Wurthsdorp/ Mogwadi town cluster.				
100.	Lephalale - Bulk Water Augmentation (Eskom)	Limpopo SIP 1 (Unlocking the Northern Mineral Belt with Waterberg as the Catalyst)	Feasibility	Water supply to 104,144 people in 25,401 households. The local sources were investigated, the yield were not sufficient, and the quality was not fit for human consumption. This project is part of existing projects, but is in need of additional bulk water from Mokolo Dam and transfer of water from the Crocodile River at Vlieepoort Wier near Thabazimbi. Components need be upgraded to allow for the growth in Lephalale because of Medupi and mining development. This includes the communities living in 38 villages near the Lephalale River in the area formerly known as Mokerong 1.	Bulk Water Supply	330 000	August 2013	In 48 months
101.	Mutash Hub	SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	Project intiated in response to the Limpopo Provincial Employment, Growth and Development Strategy (PEGDS) plan of action for the 2011/12 financial year. This project is a feasbility study to support the required water services for the High Growth Catalytic (Flag Ship) projects ranging from Mining, Industrial, Human settlement and agricultural development.	Bulk Water Supply	200 000	July 2014	In 48 months
102.	Ohrigstad Bulk Water Supply	Mpumalanga SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	Water supply to 26,400 people. The project covers 29 rural villages and one formal village. The Implementation Ready Study proposed that the boreholes be refurbished, new ones developed and linked to the reticulation	Bulk Water Supply	450 000	January 2015	In 48 months
103.	Eerstehoek Water Treatment Works	Mpumalanga	Design	Regional Water Scheme will consist the upgrade of Eerstehoek WTW from a capacity of 13.4Ml/day to 30Ml/day. This will also include the construction of bulk infrastructure to convey water from Eerstehoek to Ekulindeni which will en route service the area sthat require water supply for Tjakastad, Mooiplaas and Elukwatini	Bulk Water Supply	70 000		In 48 months
104.	Metula/ Empuluzi Water Treatment Works	Mpumalanga	Design	The feasibility or implementation readiness study is about the upgrading of various Water Treatement Works, bulk water pipelines and the upgrading of storage facilities in Gert Sibande District Municipality. It is envisaged that the project wil supply water to satisfy the 2030 planning horizon for Albert Lethuli and Mkhondo and Msukaligwa Local Municipalities.	Bulk Water Supply	110 000		In 72 months
105.	Ermelo North Water Treatment Works	Mpumalanga	Design	The feasibility is about assesing the suitable option for the provision of water to a population of between 170 000 and 205 602 by 2030 based on a consumption of 200l/c/d. It is envisaged that water will be pumped to Waberton, Chissiesmeer and Breyton.	Bulk Water Supply	185 000		In 36 months
106.	Greylingstad Water Treatment Works	Mpumalanga	Design	There is a high demand for water in the Balfour, Siyathemba, Greylingstad/Willemdal and Nthorwane. The current supply is presumably sufficient to cater Grootvlei power station and the surrounding households. The study aims at investigating the appropriate solution to provide water to the study area and also determine the relationship with the Waste Water Treatment Works. It might be that the study result into both water and sanitation- waste water projects.	Bulk Water Supply	60 000		In 36 months
107.	Bloemendal Bulk Water Supply	Mpumalanga	Construction	32 km pipeline and 500mm in diameter and will consist of continously welded laid in backfilled trech. It starts at the existing Rand Water Bloemmendal Pump station and ends at the existing Delmas Reservoir. The project would be funded by Rand Water, Grants and Delmas Local Municipality	Bulk Water Supply	180 330	November 2011	In 36 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
108.	Emalahleni Water Treatment Works Upgrade	Mpumalanga	Construction	Upgrading of the existing WTW and related water infrastructurefor the Emalahleni Local Municipality to provide water to communities within the Witbank area and surrounding villages.	Bulk Water Supply	120 000	July 2011	In 24 months
109.	Thembisile/Mloto bulk pipeline	Mpumalanga	Feasibility	Regional Water Scheme to supply water to Nokeng Tsa Taimane ,Local municipality and development of 500 Houses.	Bulk Water Supply	58 000	February 2013	In 24 months
110.	Western Highveld Regional Bulk	Gauteng	Feasibility	Construction of a new bulk pipelne and resevoir for Rust de Winter (Moretele) Bulk Scheme whilst considering the integration with the Western Highveld parts of Limpopo and Gauteng provinces. Water to augment Moetse and Thembisile Local Municipaity from Mkhombo dam	Bulk Water Supply	257 000	July 2013	In 60 months
111.	Northern Nzikazi Water Treatment Works	Mpumalanga SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	Constructon of a new WTW in Mbombela to provide clean drinking water to communiities within the North Nzikazi area. There is also a possibility of extending Hoxani Treatment Works in Bushbuckridge in order to accommodate the need for water in Northern Nzikazi area. Construction of bulk treatment works.	Bulk Water Supply	45 000	November 2012	In 24 months
112.	Mbombela 2010 Water and Sanitation	Mpumalanga SIP 6 (Integrated Municipal Infrastructure Project)	Complete		Bulk Water Supply	125 068	Complete	Complete
113.	Hoxane Bulk Water Supply (Inyaka Marite)	Mpumalanga SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The project is a water treatment facility to enable the provision of potable water to communities in Bushbuckridge and Mbombela - Nsikaze. The project has co-fund from the Mbombela and Bushbuckridge municipalities.	Bulk Water Supply	25 500	November 2012	In 24 months
114.	Acomhoek Bulk Water Supply	Mpumalanga SIP 6 (Integrated Municipal Infrastructure Project)	Construction	The recommission and reconstruction of a 24,5 km of a pipeline	Bulk Water Supply	166 600	September 2011	In 15 months
115.	Thaba Chweu-Ground water development	Mpumalanga SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Borehole development in Lydenburg	Bulk Water Supply	8 500		
116.	Driekoppies Water Treatment Works Upgrading	SIP 6 (Integrated Municipal Infrastructure Project)	Design	Upgrading of the existing WTW in Nkomazi Local Municipality to provide water to communities within the Driekoppies area and surrounding villages. The upgrading is from 20 Ml/day to 25 Ml/day for 200 000 people. Extending bulk to Langeloop.	Bulk Water Supply	70 000	December 2012	In 48 months
117.	Sibange Water Treatment Works	SIP 6 (Integrated Municipal Infrastructure Project)	Design	Constructon of a new WTW in Mbombela to provide clean drinking water to communiities within the Sibange area. Bulk 10mL/day to supply Mgobodzi,Madadeni,Magudu and Sibange.	Bulk Water Supply	65 000	December 2012	In 36 months
118.	Bulk water supply to Port Nolloth	Northern Cape	Design	Water supply to 6,910 people in 1,382 households. 250mm pipeline from Alexander Bay (77km) to provide in the next 20 year water demand of Port Nolloth. Desalination of sea water is an option.	Bulk Water Supply	27 000	January 2013	In 24 months
119.	Oranje river - Colesberg - Noupoort Bulk Water Supply	Northern Cape	Construction	Umsobomvu Bulk Supply Scheme, Phase 1: pipeline from Orange River to Colesberg WTW, Phase 2: upgrading and extension of Colesberg WTW, Phase 3: pipeline from Colesberg to Noupoort.	Bulk Water Supply	184 800	October 2009	In 36 months
120.	Colesberg Wastewater treatment works	Northern Cape	Construction	Construction of a new Wastewater treatment works in Colesberg	Waste Water Services	-	See above	See above
121.	Van der Kloof/ Petrusville	Northern Cape	Complete		Bulk Water Supply	42 620	Complete	Complete
122.	De Aar Bulk Water Supply	Northern Cape	Design	The development of 15 undeveloped production boreholes to the north of De Aar in the Blaauwkrans borehole field. Equipping the	Bulk Water Supply	42 640	October 2012	In 24 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				boreholes with pumps and installing collecting pipelines, a booster pump station and a rising main to De Aar (26.75km). No conventional treatment will take place only disinfection at the boreholes.				
123.	Bulk water supply to Hopetown (Thembelihle)	Northern Cape	Construction	Water supply to 20,495 people in 4,099 households. The bulk water supply scheme for Thembelihle Municipality consists of supplying water from the Orange River to Hopetown (LM's own funds), the upgrading of the Hopetown Water Treatment Works and supplying potable water from Hopetown to Strydenburg. A prerequisite for the construction of the pipeline from Hopetown to Strydenburg is to utilise all the groundwater in and around Strydenburg. Phase 2 will therefore be divided into 2 sub phases. Phase 2.1 Exploit groundwater in Strydenburg to maximum potential. If the groundwater should still be supplemented with surface water Phase 2.2 will be the construction of the pipeline. Initially an IRS report will be compiled for the Strydenburg project during 2011/12.	Bulk Water Supply	54 697	December 2011	In 18 months
124.	Kenhart Bulk Water Supply	Northern Cape	Complete		Bulk Water Supply	81 300	Complete	Complete
125.	Tsantsabane BWS and Sanitation	Northern Cape	Complete		Waste Water Services	313 960	Complete	Complete
126.	Riemvasmaak BWS	Northern Cape	Complete		Bulk Water Supply	16 516	Complete	Complete
127.	Niekerkshoop Bulk Water Supply	Northern Cape	Tender		Bulk Water Supply	13 117		
128.	Heuningvlei / Moshaweng Bulk Water Supply	Northern Cape SIP 6 (Integrated Municipal Infrastructure Project) SIP 11 (Agri-logistics and rural infrastructure)	Construction	Heuningvlei is a Multi Use Scheme that supply water to both rural communities and stock farmers. The scheme was constructed 30 years ago and lacks a sufficient source. The project entails the identification of a sustainable source, the rehabilitation of the existing infrastructure, the construction of new boreholes, reservoirs and the extension of the bulk and reticulation lines.	Bulk Water Supply	191 760	October 2011	In 48 months
129.	Kuruman Bulk Water Supply	Northern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Tender	To address the bulk water storage crisis in Kuruman/Wrenchville and the bulk water supply challenges in the Ga-Segonyana Municipality.	Bulk Water Supply	146 806	September 2012	In 16 months
130.	Kathu Wastewater treatment works	Northern Cape SIP 6 (Integrated Municipal Infrastructure Project)	Construction	Construction of a new Wastewater treatment works in Kathu	Waste Water Services	60 858	August 2012	In 12 months
131.	Kammiesberg / Namakwa pipeline ext	Northern Cape	Feasibility			48 000		
132.	Hantam Desalination Plant	Northern Cape	Feasibility	Installation of a new desalination plant in Brandvlei and associated infrastructure.	Bulk Water Supply	27 240	October 2013	In 18 months
133.	Windsorton to Holpan Bulk Water Supply	Northern Cape	Feasibility	The provision of bulk water supply to the community of Holpan. The project consists of the construction of new raw water storage dam, new 47Kℓ/hour module, new wash water recovery ponds, new 160mm Ø rising main to Holpan as well as an elevated reservoir and related electrical and mechanical works.	Bulk Water Supply	20 000	April 2013	In 12 months
134.	Upgrading of the Homevale Waste Water Treatment Plant	Northern Cape	Construction	Sanitation service to 104,515 people in 20,903 households. The Homevale waste water treatment plant in Kimberley is operating above the design capacity at an average flow of 33Mℓ /day and is not able to accommodate any additional load. The LM is not in	Waste Water Services	154 668	November 2012	In 24 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				the position to continue with planned housing developments. Upgrade waste water treatment plant from a 30Mℓ to a 50Mℓ plant.				
135.	Renosterberg	Northern Cape	Feasibility		Bulk Water Supply	13 000		
136.	Van Wyksvlei BWS	Northern Cape	Feasibility		Bulk Water Supply	33 672		
137.	Extension of the Kalahari East pipeline	Northern Cape	Feasibility	Water supply to 8,650 people in 1,730 households and various farms. The extension of the Kalahari East pipeline to supply water to the north western area of the Kgalagadi region which includes the Mier area as well as the southern parts of Botswana. The project entails the construction of a 600km pipeline as well as associated infrastructure such as pump stations.	Bulk Water Supply	304 000	June 2013	In 48 months
138.	Salt Lake BWS		Feasibility	Water supply to 860 people in 232 households. Water Supply to Salt Lake and Hayfield. Currently a feasibility study is conducted to investigate different options available to address the water supply challenges in the area. The 3 scenarios which are investigated are 1) water directly from the Orange River, 2) water from the Oranje-Riet canal system and 3) water from the Riet River. Groundwater will still be used as a supplement water source.	Bulk Water Supply	20 000	October 2013	In 18 months
139.	Maqwassi Hills RWS	North West	Complete		Bulk Water Supply	156 203	Complete	Complete
140.	Ratlou Local Municipality Bulk Water Supply	North West SIP 4 (Unlocking the economic opportunities in North West Province) SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	Upgrade water treatment works at Setumo Dam, pipelines, resevoirs, boreholes. (alternative the construction of the Setlagole Dam and pump stations)	Bulk Water Supply	218 090	July 2012	In 36 months
141.	Ventersdorp Bulk Water Supply	North West SIP 4 (Unlocking the economic opportunities in North West Province)	Construction	Water supply to 49,196 people. Bulk water augmentation for Ventersdorp. The water resource is the Schoonspruit Eye which has a yield of 71ML/d. Upgrade the water treatment works and construct a bulk supply pipeline from the Schoonspruit Eye to the WTW, a pipeline from WTW to a new 5ML reservoir.	Bulk Water Supply	41 300	July 2012	In 18 months
142.	Moretele Bulk Bulk Water Supply	North West SIP 4 (Unlocking the economic opportunities in North West Province)	Feasibility	The proposed project scope of works entails the construction of abstraction works at the Klipvoor Dam which straddles the boundary of the Moretele and Madibeng Local Municpality. A 9 Ml Water Treatment Works is proposed at the dam to purify the raw water, construction of a purified water pump station, bulk water supply line and two new storage reservoirs that will supply the surropunding villages.	Bulk Water Supply	340 000	November 2014	In 48 months
143.	Bojanala Regional Water Supply	North West SIP 4 (Unlocking the economic opportunities in North West Province)	Feasibility	Phase 1 of the project is the consolidation of all feasibility studies in the Bojanal Platinum DM area, whcih will direct the implementation of the projects in the area. Phase 2 is currently envisaged to abstract water from Hartbeespoort Dam, purify to industrial standard only and make it available to the mines in the Rustenburg Madibeng Corridor that currently uses potable water for processes. The idea is that Phase 2A will ensure that the mines shed some of their potable water demand, in exchange for the industrial standard water, making it available for primary domestic use in Rustenburg and Madibeng. Phase 2B of the	Bulk Water Supply	400 000	December 2013	In 60 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				project is currently seen to be implemented when Rustenburg has absorbed all the released potable water from Rand Water and the Magalies Water systems. New water treatment works will be built at Rustenburg and at Madibeng where only the additional potable water demand can be met by purifying the industrial grade water to potable standards. The main components of the project will consist of an abstraction works from the Crocodile River, an industrial water treatment works (to be only dissolved air flotation process to remove algae), a high lift pump station and pipeline, roughly along the N4 between Madibeng and Rustenburg.				
144.	Koster Waste Water Treatment Works upgrade	North West SIP 4 (Unlocking the economic opportunities in North West Province)	Feasibility	The project consists of the construction of a WWTW, encompassing the construction of all elements required in the waste water treatment process to ensure the required effluent quality. The exact configuration will be finalized during the feasibility phase.	Waste Water Services	90 000	June 2013	In 24 months
145.	Mafikeng South Bulk Water Supply	North West SIP 4 (Unlocking the economic opportunities in North West Province) SIP 6 (Integrated Municipal Infrastructure Project)	Feasibility	The City regularly experiences severe water shortages. Approximately 30% of the population have no access to basic acceptable water supply at all. Major housing developments required to address acute housing shortage cannot proceed due to lack of bulk water supply infrastruture. Upgrading Water Treatment Works, Pipelines, Reservoirs, Pumpstations - to augment bulk water supply to Mafikeng.	Bulk Water Supply	269 000	September 2013	In 36 months
146.	Wolmaransstad Waste Water Treatment Works	North West SIP 4 (Unlocking the economic opportunities in North West Province)	Feasibility	The main purpose of this project is to upgrade the existing 4.5Ml/day treatment works to 9.5Ml/day to meet the current and projected future effluent treatment requirements in order to avert environmental pollution as a result of overflowing of high volume of untreated effluent. In addition a sewer pump station will be upgraded in Lebaleng, as well as the rising main from Lebaleng to the WWTW.	Waste Water Services	130 000	August 2013	In 24 months
147.	Potchefstroom Water Treatment Works upgrade	North West SIP 4 (Unlocking the economic opportunities in North West Province)	Feasibility	Increase the capacity of the Potchefstroom WTW by 30 Ml/d, together with related pipe work. Details will be known once all planning work has been completed.	Waste Water Services	150 000	June 2013	In 36 months
148.	Citrusdal Waste Water Treatment Works	Western Cape	Tender	Present demand is 1,5 Ml/day, the WWTW was designed for 0,9 Ml/day. The existing works will be scrapped because they are also in the flood area. (DWA wants to see the old works scrapped). An urgent new WWTW with higher capacity (4 Ml/day) is urgently required	Waste Water Services	52 668	April 2013	In 24 months
149.	Clanwilliam Water Treatment Works	Western Cape	Design	The current water is abstracted from the ClanWilliam dam is not treated and only chlorinated. The biological contents of the water is reported to be having a health impact. At the same time the abstraction works needs to be upgraded to co-inside with the raising of the ClanWilliam dam.	Bulk Water Supply	28 500	May 2013	In 24 months
150.	Clanwilliam / Lambertsbaai Regional Water Supply	Western Cape	Construction	Desalination of sea water and upgrading of bulk supply system from Clanwilliam	Bulk Water Supply	61 500	May 2011	In 24 months
151.	West Coast Desalination Plant	Western Cape	Design	The water demand of the West Coast district has increased due to urban and industrial growth in the area. The water demand has increased by 83% over the last 12 years. A 8,5 Ml/day desalination plant has been approved	Bulk Water Supply	563 213	June 2012	In 48 months
152.	Tulbagh Bulk Water Supply	Western Cape	Construction	Water supply from Schalkenbosch and Klein Berg rivers	Bulk Water Supply	69 761	January 2010	In 30 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
153.	Drakenstein Waste Water Treatment Plant	Western Cape	Construction	During 2004 Drakenstein Municipality started with the upgrade of the process of the Paarl WWTW to be a fully biological nutrient removal plant. During 2005 a 20-year strategic plan for bulk waste water infrastructure in the Southern Drakenstein Municipal area was completed and approved by Council. This plan covered all aspects of bulk conveyance and treatment of all waste water produced in the Municipal area, south of Wellington, including Wellington.	Waste Water Services	150 157	August 2010	In 30 months
154.	Stellenbosch Waste Water Treatment Works	Western Cape	Tender	The Stellenbosch WWTW is the only WWTW currently serving the town of Stellenbosch including the surrounding suburbs and the impoverished community of Kayamandi. The Works was commissioned in 1924, and currently has a hydraulic capacity of approximately 20 Ml/day. The rapid urban expansion of Stellenbosch has placed pressure on the existing WWTW, and is currently hindering development within the urban edge of Stellenbosch. The existing backlogs in the study area, approximately 16 000 housing units, places further pressure on the works. Further, the works is currently in a very poor condition and has recently been rated as one of the 20 worst works in the Western Cape. The project involves the refurbishment and significant increase in capacity of the WWTW	Waste Water Services	304 256	October 2012	In 48 months
155.	Worcester Bulk Water Supply	Western Cape	Construction	The Breede Municipality provides services to an area of approximately 2 995 km2. Besides the town (urban, commercial and industrial) the land in the municipal area is predominantly used for agriculture, and also includes about 23% mountainous topography. Worcester is the commercial and administrative centre for the Breede Valley Municipal area. The current peak demand is about 54 Ml/d (based on a peak week factor of 1.5) and the existing water supply capacity is 55 Ml/d is therefore only just coping. Considering the average growth in demand of 2 % pa over the past 20 years, it is urgently required to start augmenting the water supply in order to meet the water requirements of the future.Rawsonville. The current water supply problems have resulted in a hold on all development in the town of Rawsonville. This is resulting in suppression on the towns growth. The most cost effective and favourable solution for Rawsonville's bulk water supply is to provide a connection to the pipeline from Stettynskloof.	Bulk Water Supply	190 585	November 2012	In 36 months
156.	Grabouw Waste Water Treatment Works	Western Cape	Construction	The Grabouw WWTW needs urgent upgrade, housing development has been suspended due to lack of capacity	Waste Water Services	33 946	July 2012	In 24 months
157.	Hermanus Bulk Water Supply	Western Cape	Construction	The current water sources of the Greater Hermanus yield 12.1 Mℓ/day. The water demand of the area (AADD) 11.8 Mℓ/day will soon be reaching the authorized sustainable The infrastructure of the Preekstoel Water Treatment Works is ageing, and the peak demand for treated water (25-30 Mℓ/day) is more than its design capacity (24 Mℓ/day). The Greater Hermanus area has a high population growth rate, and several low cost housing developments are planned for the near future. Two more well fields (7 boreholes in total) are currently being developed in the Hemelen-Aarde valley, north of Hermanus. Conveyance and treatment infrastructure have to be developed to enable utilization of these additional boreholes.	Bulk Water Supply	87 814	September 2011	In 24 months
158.	Hermanus Waste Water	Western Cape	Construction	The Hermanus WWTW needs urgent upgrade, housing	Waste Water	52 214	August 2010	In 24 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
	Treatment Works			development has been suspended due to lack of capacity. The municipality has secured a partial loan and is about to start the project. The existing Waste Water Treatment (WWTW) works is being upgraded from a 7.7 Ml/day to 11.4 Ml/day.	Services			
159.	Swellendam Waste Water Treatment Works	Western Cape	Construction	Currently the waste water discharged from the two existing plants, N2 WWT and the Klipperivier WWTW produce effluent that does not comply with the required standards. Proposed developments and low cost housing have been put on hold due to the limited treatment capacity. The project will provide treatment capacity for the next 20 years. Swellendam registered a annual growth rate of 3.2 % in GDPR from 1995 to 2004.	Waste Water Services	61 150	May 2012	In 24 months
160.	Struisbaai Waste Water Treatment Works	Western Cape	Construction	A Sewage Collector and Treatment Scheme for Struisbaai (SB) and L'Agulhas (LA) has been identified as an urgent requirement by the IDP process and Water Services Development Plan. Present sewage system of septic and conservancy tanks has become a logistical emptying problem for tanker services over peak seasons and the risk of ground water and surface pollution is increasing. Upgrade of WWTW, about to start construction but waiting for final approval of EIA	Waste Water Services	14 836	October 2012	In 24 months
161.	George BWS augmentation	Western Cape	Complete		Bulk Water Supply	272 000	Complete	Complete
162.	Outdtshoorn Groundwater Supply	Western Cape	Construction	The towns of Oudtshoorn, Calitzdorp, De Rust and Dysselsdorp are situated in the Klein Karoo region of the Western Cape. The area is dry, water resources are limited and in all cases the available sources are shared between municipal users and irrigators. The eradication of backlogs, investments to reduce poverty, population growth and development are placing increased demands on municipal infrastructure and water supply in particular. Hence, it becomes necessary to augment the existing bulk water supply systems with a new borehole wells and connecting pipelines	Bulk Water Supply	190 000	April 2013	In 24 months
163.	Beaufort West Bulk Water Supply	Western Cape	Feasibility	The municipality is currently facing crippling shortages of water supply due to the scarcity of water and at the same time meeting the increase in demand. The proposed project is regarding the exploration of ground water is the 1st step, the development of boreholes and the connection of pipelines	Bulk Water Supply	10 000	April 2013	In 20 months
164.	Vanrhynsdorp Raw Water	Western Cape	Feasibility	Water is supplied through the Olifants water scheme, received water from ClanWIlliams dam through channel, there is an annual 2 week maintenance period where water is not delivered. An storage facility is required to ensure water supply during the two weeks and also in the event of any interruption of water supply from the channel.	Bulk Water Supply	83 239	July 2013	In 24 months
165.	Klawer Bulk Water Supply	Western Cape	Feasibility	The municipality is in the process of building 3150 RDP house, will be built in two phases, 1500 ph 1 and the rest in phase 2. 1st phase to start within 2-3 years, and the second phase at some point in the future. A new jail has also been built in Vanrhynsdorp placing additional strain on the bulk infrastructure. The project will augment the bulk water supply to the jail and the new RDP houses	Bulk Water Supply	25 670	June 2013	In 24 months
166.	Paarl Bulk Sewer	Western Cape	Feasibility	In the Eastern suburbs of Paarl and South of N1 are mainly new areas, with an additional 5000 low cost houses been developed. An urgent bulk sewage system is required to transfer the effluent to the existing WWTW. Phase 1 of 3 has already started and the	Waste Water Services	148 000	May 2013	In 36 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
				municipality has secured a R 60 million loan.				
167.	Calitzdorp & Ladismith Waste Water Treatment Works	Western Cape	Feasibility	Upgrade of WWTW urgently required. The WWTW was refurbished 3 years ago but needs to be urgently increased in capacity Sewage treatment capacity was not increased since new 360 homes developed	Waste Water Services	15 000	September 2014	In 24 months
168.	Kannaland Dam Relocation	Western Cape	Feasibility	The existing dam is leaking significantly an has been declared unsafe. A new dam is required to replace the old dam.	Bulk Water Supply	22 800	November 2013	In 24 months
169.	Bitou Cross Border Bulk	Western Cape	Feasibility	The objective of this study is to consider integrating and upgrading the bulk water supply of Knysna, Bitou region. This will not only meet the water demands for the region but will also help alleviate risk of supply as it will combine different water resources and catchment areas. The potential cross-municipal border bulk water supply schemes, combinations of resources, potential for alternative sources e.g. water re-use sewage effluent and desalination. The project will aim to augment the water supply for various municipalities in the Eden area.	Bulk Water Supply	250 000	April 2014	In 24 months

Table 7: Water infrastructure investment plan for the next 10 years in the planning phase

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
Mega projects (over R400 million per year for a minimum of three years, or at least R1 billion total project cost)								
1.	Mzimvubu Water Project	Eastern Cape	Feasibility study	Construction of the Ntabelanga Dam on the Itsitsa River, tributary of the Mzimvubu River. The possible development of irrigation and afforestation, conventional and pumped storage hydropower plants, water transfer to the Gauteng Province (in a later phase), bulk distribution infrastructure supplying water to the identified demand centres including possible tourism development, municipal water supply and agro-business initiatives	Dam, Water Treatment Plant, Pipelines, Reservoirs	R20 billion	2015	48 months
2.	Mkomazi Water Project: Smithfield Dam	KwaZulu-Natal	Feasibility study	To augment the water supply to eThekwini, uMgungundlovu and the surrounding areas	Dam and Water Delivery Tunnel	R10 billion	2018	48 months
3.	Mvoti River - iSithundu Dam or Welverdiend Dam	KwaZulu-Natal	Feasibility study to start in 2014	To secure water supply to domestic & industrial users in the Lower Mvoti basin area (Stanger area, KZN)	Dam, Pump station, Diversion Weir	R1 billion	2020	36 months
4.	Lower Orange River - Vioolsdrift Dam	Northern Cape	Pre-feasibility study completed	To increase the yield of the Orange River to cater for increasing demand in the area.	Dam	R561 million	2017	36 months
5.	Western Cape Water Supply System Augmentation Project: Voëlvlei Supplement Scheme	Western Cape	Feasibility study	To augment the water supply to the City of Cape Town and the surrounding areas	Dam, Abstraction Works, Pipelines, Pump station	R 500 million	2018	24 months
6.	Lusikisiki Regional Water Supply Scheme: Zalu Dam on the Xura River	Eastern Cape	Feasibility study	To secure water supply for domestic & small scale irrigation in Lusikisiki and surrounding areas.	Dam, Water Treatment Plant, Pipelines, Reservoirs	R 500 million	2015	36 months

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
7.	Mzimkulu River- Ncwabeni Off-Channel Storage	KwaZulu-Natal	Feasibility study	Ensure a reliable water supply to the northern part of the Lower KZN South Coast during dry periods	Dam, Pump station, Pipeline	R650 million	2015	30 months
8.	Acid Mine Drainage (phase 1)	Gauteng			Treatment plant			
9.	Acid Mine Drainage (phase 2)							
10.	Lesotho Highlands Phase 2	International		To augment the Vaal River System which supplies water to Gauteng and surrounding areas	Dam, Tunnel and associated works			
Large projects (cost between R90 and R400 million per year -Totalling at least R250 million but less than R1 billion)								
11.	Sunday River Government Water Scheme: Lower Sundays	Eastern Cape		Extension of the Lower Sundays Government Water Scheme canal system with the emphasis to provide irrigation water to resource poor farmers	Canal, Balancing Dam, Pipeline			
12.	Koonap River - Foxwood Dam and associated works	Eastern Cape	Feasibility study	To secure water supply for domestic & small scale irrigation in Adelaide and surrounding areas.	Dam, Water Treatment Plant, Pipelines, Reservoirs			

Table 8: Departmental long term infrastructure transfers to government institutions in the construction phase

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
Mega projects (over R400 million per year for a minimum of three years, or at least R1 billion total project cost)								
1.	ORWRDP (Ph 2A) - De Hoop Dam	Limpopo SIP 1: Unlocking the northern mineral belt with Waterbrg as Catalyst	Construction	Water supply to new mining developments, augmentation of domestic water supplies to urban and rural users in the middle Olifants River Catchment area including Polokwane, Mokopane, Lebowaghomo and to various communities on the Nebo Plateau and Sekhukhune	Dam	3 074 000		
2.	ORWRDP (Ph 2B-I) - Bulk distribution (Sub Phases 2C and 2D)	Limpopo SIP 1: Unlocking the northern mineral belt with Waterberg as Catalyst	Construction	Bulk distribution works from Flag Boshielo to Mokopane, De Hoop to Steelpoort link, Steelpoort to Mooihoek, Mooihoek to Olifantspoort, De Hoop to Steelpoort, Nebo Plateau and Roossenekal including the incorporation of LWUA infrastructure.	Pumping stations, pipelines, balancing dams, operational infrastructure and appurtenant structures	3 472 043		
3.	GLeWAP Phase (N'wamitwa Dam)	Limpopo SIP 1: Unlocking the northern mineral belt with Waterbrg as Catalyst	Feasibility	To meet the projected growing primary supply requirements to the year 2025, to improve the water availability for the riverine ecosystem. Building N'wamitwa Dam	Dam, Water Treatment Plant, Pipelines, Reservoirs	1 700 000		
4.	Dam Safety Rehabilitation Programme	Country wide	Construction	Rehabilitation of assets and dam safety work - continuous projects	Dam	2 800 000		
5.	Water Resources Project: Raising of Clanwilliam Dam	Western Cape SIP 5: Saldanha-Northern Cape Development Corridor	Design	Upgrading of the existing dam to stabilise the distortion and the augmentation of agricultural water supply to meet increasing demands.	Dam	1 830 000		
6.	Mokolo and Crocodile River (West) Water Augmentation Project (Phases 1)	Limpopo SIP 1: Unlocking the northern mineral belt with Waterberg as Catalyst	Construction	Augmentation of domestic and industrial water supply to the new Eskom/IPP power station(s), extension of associated mining activities and fast growing population in the area.	Pumping stations, pipelines, balancing dams, operational and national Key Point	2 138 000	September 2011	April 2014

No	Project name	Location	Current project stage	Project description	Outputs	Projected total project cost	Projected project duration	
						R'000	Construction start	Finish
7.	Mokolo and Crocodile River (West) Water Augmentation Project (Phases 2)	Limpopo SIP 1: Unlocking the northern mineral belt with Waterberg as Catalyst	Feasibility		infrastructure and appurtenant structures	13 950 000	April 2015	December 2018
Large projects (cost between R90 and R400 million per year -Totalling at least R250 million but less than R1 billion)								
8.	GLeWAP Phase (Tzaneen Dam Raising)	Limpopo SIP 1: Unlocking the northern mineral belt with Waterberg as Catalyst	Design	To meet the projected growing primary supply requirements to the year 2025, to improve the water availability for the riverine ecosystem. Raising of Tzaneen Dam	Dam, Water Treatment Plant, Pipelines, Reservoirs	125 000		
9.	Development of Raising of Hazelmere Dam	KwaZulu-Natal SIP 2: Durban-Free State Gauteng Logistics and Industrial Corridor	Design	Augmentation of water supply to Umgeni Water for treatment to KZN north coast (Mdloti to Thukela areas)	Dam (radial crest gates)	360 000		
10.	GLeWAP distribution		Construction			605 000		