Johannesburg Water (SOC) Ltd

BUSINESS PLAN 2013/14

Joburg
a world class African city

Johannesburg Water

Providing Water. **Providing Life.**

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Managing Director: Johannesburg Water
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Date

Member of Mayoral Committee: Environment, Infrastructure & Services Department
Cllr Matshidiso Mfikoe

.....

Date

LIST OF ACRONYMS

Abbreviation	Explanation
AG	Auditor General
AMD	Acid Mine Drainage
AMI	Advanced Metering Infrastructure
BBBEE	Broad Based Black Economic Empowerment
BSC	Balanced Scorecard
BTE	Biogas to Energy
CAPEX	Capital Expenditure
CBO's	Community Based Organizations
CIDB	Construction Industry Development Board
CoJ	City of Johannesburg
CPI	Consumer Price Index
CRC	Current Replacement Value Cost
DRC	Depreciated Value Replacement Cost
DWA	Department of Water Affairs
ECSA	Engineering Council of South Africa
EPWP	Expanded Public Works Programme
ERM	Enterprise Risk Management
FY	Financial Year
GDS 2040	Growth & Development Strategy 2040
h/h	Households
IAMP	Infrastructure Asset management Plan
IDP	Integrated Development Plan
IOS	International Organization of Standardisation
IT	Information Technology
IWA	International Water Association
JW	Johannesburg Water
LoS	Level of Service
MNF	Minimum Night Flow
MOE's	Municipal Owned Entities
NGOs	Non- Governmental Organizations
NOSA	National Occupational Safety Association
NRW	Non-Revenue Water
OHS	Occupational Health & Safety
PESTEL	Political, Economical, Social, Technological, Environment and Legal
PPP	Public Private Partnership
RUL	Remaining Useful Life
SHSUP	Sustainable Human Settlement Upgrade Programme
SLA	Service Level Agreement
SMART	Suitable, Measurable, Achievable, Relevant & Time Bound
SMMEs	Small, Medium and Micro-sized Enterprises
SWM	Smart Water Meter
SWOT	Strengths, Weaknesses, Opportunities & Threats
UFW	Unaccounted For Water
USDG	Urban Settlement Development Grant
VIP	Ventilated Improved Pit-latrine
WC-WDM	Water Conservation & Water Demand Management
WWTW	Waste Water Treatment Works

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Executive **Summary**

The Business Plan covers the period 2013/14 FY to 2016/17 FY – with a key focus on 2013/14 FY. It sets out the levels of services that JW intends to provide and the improvements that will be delivered during this period. The Plan has been designed around the needs and priorities of CoJ customers, with security of supply a key consideration. It will also deliver the statutory outcomes required by the DWA – as the key custodian of water in South Africa.

The CoJ had provided key strategic priorities in order to achieve the outcomes as outlined in GDS 2040. Of special importance in the nine (9) priorities, are the first five (5) – that need to be achieved by 2016. The priorities – as adopted by the Mayoral Lekgotla in order of importance – are:

- Financial Resilience & Sustainability
- Sustainable Human Settlement Upgrade
- SMMEs Development & Entrepreneurship
- Agriculture & Food Security
- Active & Engaged Citizenry
- Smart City
- Resource Sustainability
- Investment Attraction
- Green Economy.

In producing this final Plan, JW has struck a careful balance between the work it must do in order to continue delivering the best-ever levels of services such as accommodating growth in demand – and the ability and willingness of customers to pay for the necessary bill increases. In view of the economic climate which is affecting both the customers and business, JW has re-examined every aspect of the Plan to ensure that all the work it intends to undertake continues to be essential in the current circumstances. The approved water tariff increase has been set at 9.82% – in line with the Rand Water proposed tariff of a similar percentile.

To deliver the investment programme, JW will need to raise an unprecedented level of finance – R25 billion – over the next ten years. This will be targeted at Capital Programmes and these huge investments are expected to come from a pool of different sources such as donor grant funding, PPPs, lenders and investors – in a financial market that is likely to remain both highly volatile and limited in capacity. Securing this funding will depend on JW's ability to provide returns that reflect the risks taken by those capital providers. The assessment of the cost of borrowing and adequate returns recognises these requirements. WC-WDM is one of the key investment programmes that will assist JW to service such

capital investment loans – through the expected savings that will be realised. The analysis shows that JW can achieve efficiencies of about 7% on the capital programmes over the next three to five year period. These savings are projected at about R 368 million per annum over the next two years – at the current bulk tariff rates.

In the 2013/14 FY, JW will invest R1.020 billion in Capital Programmes focusing on the upgrading and renewal of water and sewer networks and expansion of WWTWs to increase capacity – and to a large degree WC-WDM initiatives. To meet future demand, JW will prioritise the pipe replacement programme, pressure management, and wastewater upgrades which are essential for maintaining service ability and preventing leakage deterioration. JW has maximised the additional service benefits that can be delivered through this work – such as metering and reducing interruptions to supply. In addressing the challenges of poverty alleviation, unemployment (job creation) and spatial inequality, a Co-production strategy has been adopted by the organization which will result in delivering water and sanitation services in an equal and reciprocal relationship between JW and the communities it serves, making better use of each other's assets and resources to achieve better outcomes and improved efficiencies. The organization plans to spend in excess of R500 million in the next five years on these programmes.

The following six key principles have been applied to frame co-production strategies discussed in the detailed business plan, these are;

- **Recognising people as assets:** seeing people as equal partners in the design and delivery of services, not passive recipients of – or worse, burdens on – public services.
- **Building on people's existing capabilities:** rather than starting with people's needs (the traditional deficit model), co-produced services starts with peoples capabilities and looks for opportunities to help make these flourish.
- **Mutuality and reciprocity:** co-production is about a mutual and reciprocal partnership, where professionals and people who use services come together in an interdependent relationship recognising that each are invaluable to producing effective services and improving outcomes.
- **Peer support networks:** engaging peer and personal networks alongside professionals as the best way of transferring knowledge and supporting change.
- **Blurring distinctions**: blurring the distinction between professionals and recipients, and between producers and consumers of services, by reconfiguring the way services are developed and delivered.
- **Facilitating rather than delivering:** enabling professionals to become facilitators and catalysts of change rather than providers of services.

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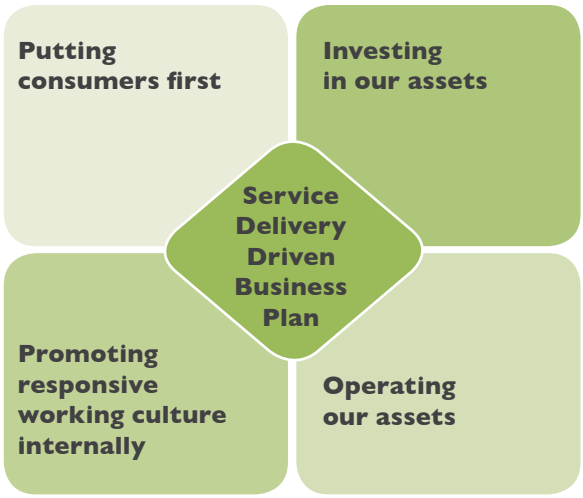
In achieving these priorities it's critical that JW, as an entity is viable and efficient in the running of the business. To improve internal process and align with the King III recommendations on acceptable management practices, Risk Management and Internal Audit are critical functions that will see the company moving towards collaboration and helping in bringing a holistic view of an organization's risk profile and assurance activities.

To increase the levels of company risk to maximise control efficiencies and optimise overall assurance to the Board Sub-committees such as audit and risk committees, JW will develop a Combined Assurance Framework such that it can maximise risk and governance oversight.

In order for the entity to deliver on the plan, it will require the support of the shareholder with regards to the allocation of the required budget, approval of requested tariffs and compliance to the SLA.

The goal is to produce a Business Plan that delivers the services to customers in the most effective and efficient way and with a better apportionment of risk between customers and JW. The factors that have guided the approach to balancing planned outcomes to produce a service-delivery-oriented plan, are presented in Figure 1 below:

Figure 1: Business Plan Guiding Factors



Promoting responsive working Culture:
JW will improve on communication to ensure that the BP is understood and embraced by all levels of the organisation. JW will build a culture where everyone is part of the team. Executive management will also be more visible at grass-roots' level such as at Depots and Regions.

Operating Our Assets:
JW has adopted an aggressive approach to operating in a cost-efficiency manner. Reduction of energy costs will be achieved by rolling out BTE in WWTWs and reduction of water losses in the network will be achieved by implementing WC-WDM interventions.

Investing in our Assets:
JW has built its investment plans from a rigorous and consistently applied risk-based approach to investment needs. The Integrated Asset Management Plan has been applied to the entire capital programme. The organisation has developed and instituted risk management processes with clear interfaces and methodologies applying to its day-to-day management, as well as longer-term planning.

Putting Consumers First:
JW has devised key programmes to ensure customer-centric provision of services. The Communication strategy sets out engagement mechanisms with various segments of consumers.

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To respond and ensure alignment to the CoJ Priorities, JW has defined key programmes that will contribute in the acceleration of water and sanitation provision. These programmes will ensure that JW delivers the services that the customers expect – providing sustainable and affordable water and waste-water services for the future.

Key Programmes that contribute to service delivery in relation to City priorities are:

Strategic Priority 1

Financial Sustainability & Resilience

JW's payment levels as at January 2013 were at 73.6% – resulting in bad-debts levels of 26.4%. The high levels of bad debts impacts negatively on the profitability, cash flow and sustainability of JW. The commitment from CoJ and target for 2013/14, will be to improve payment levels to 92% and an increase by 1% each year – to achieve 97% in the next five years.

The following key interventions will be undertaken to address this:

- Revenue enhancement and social economic development e.g. Lanseria Waste Water Treatment Plant that will be completed by 2017/18.
- Payment levels were 82% at the end of June 2012, key interventions will be taken to improve this.
- Revised SLA between CoJ and JW to be drafted to improve processes and enhance the billing and collection effort.
- Manage the reconnections between meter reading at JW and the billing at the City of Johannesburg Revenue and Customer Relations Department.
- Aim for payment levels of 95% by 2016/17.
- Reduction of annual bulk purchases from 539 000 Ml to 450 000 Ml
- Installation of 10 000 SWM in 2013/14

Strategic Priority 2

Agriculture & Food Security

JW will supply the Farming Co-operatives of CoJ with compost for collection – at no cost. This aims to encourage subsistence farming with the purpose of eradicating poverty.

To ensure the effectiveness of subsistence farming, JW will provide training to the afore-mentioned Co-operatives on rain-water harvesting and crop-irrigation methods.

Strategic Priority 3

Sustainable Human Settlement Upgrade Programme

JW will also promote and support the development of efficient and environmentally-sound human settlements, focusing in particular on integrated planning. The development of integrated human settlements is currently hampered by inadequate coordination between the different spheres of government and among provincial government departments – especially when it comes to aligning bulk infrastructure spending and plans for the provision of services. The Capital Programmes below illustrate key Programmes that support SHSUP:

- Align JW bulk-infrastructure planning with CoJ Housing Master Planning – to ensure effective integrated planning.
- Through engagements with Housing, promote sustainable resource use by exploring and encouraging the use of alternative technologies to achieve the most water-wise and cost-effective developments.
- To ensure that residents live in dignified conditions, JW will focus on reducing the household sanitation backlog from 101.675 to 99.772 h/h – resulting in 91.40 % sanitation coverage in 2013/14.
- A 100% access to water on LoS 1 & sanitation will be achieved by Decade 1 – subject to housing providing land tenure.

Strategic Priority 4

SMME & Entrepreneurship Support

Besides providing much-needed infrastructure upgrades and replacement programmes the projects identified will be crucial in creating employment opportunities that will contribute towards the country's target of creating 5 million new jobs by 2020. Therefore, labour-intensive methods of construction will be used for all projects, unless it is not possible for safety or practical reasons. In addition JW will undertake:

- Implementation of the SMME Incubator Programme – where 10 contractors will be developed to CIDB Grade 4 level by 2015/16.

Strategic Priority 5

Engaged & Active Citizenry

A critical focus for the 2013/14 FY, will also be on increased engagement with customers such that they better understand the delivery of water services. R26.8 million has been budgeted to implement programmes that are aimed at increasing stakeholder engagement – especially with reference to such things as notification of service interruptions and engagement with service improvements.

JW will conduct education and awareness programmes that seek to influence consumer behaviour on water and infrastructure usage.

Strategic Priority 6

Smart City

SWM will integrate with the electricity smart devices to create a whole new environment of efficiency. SWM will improve consumer behaviour, in that a user will see what they are paying for and thus be inclined to adjust consumption habits in order to reduce water costs. JW, in 2013/14 will roll-out the first phase and invest R20 million towards SWM and therefore 10 000 SWM would be installed in 2013/14. By 2015/16 R400 million will be invested in SWM connections.

SWM ensures accurate billing and collection of revenue from consumers and provides consumers with a simpler, more cost-effective way of managing their expenditure on water consumption.

Strategic Priority 7

Green Economy

JW endeavours to ensure a clean supply of drinking water while protecting the surrounding environment. The focus is to make sure that effluent is free of pollutants, responsibly treated and returned to the environment within the acceptable standards as per DWA requirements.

JW will embark on the roll-out of the BTE in WWTWs, in order to save on energy costs and decrease carbon emission that contributes to global climate change. In the medium to long-term, the organisation estimates that about 80% of BTE generation will be achieved at the treatment works.

JW Strategic Priority 8

Organisational Excellence

JW aims to deliver sustained and superior services that meet – and where possible – exceed the expectations of the stakeholders. Improving internal processes and systems is a key contributor towards achieving excellence as an organisation. For the 2013/14 FY, the focus will be on:

- Up-scaling of critical skills, with 1.4% of the payroll dedicated to training and development programmes.
- Implementation of the Artisans Development Programme.
- Developing and implementing a Combined Assurance Framework.
- Information, Communication and Technology to bring about innovative and efficient ways to carry JW's business – such as designing an integrated Business Intelligent System. The company's IT information-management systems principles subscribes to ISO 27000 standards on information security and a strategy is in place to attain the ISO certification.

Table 1A & 1B below, depict key priority programmes and projects that will be implemented to achieve CoJ's strategic priorities. Expected return on investment will start to be realised by the end of 2013/14 and full-blown ROI will be attained by 2016/17. A key Programme that will have meaningful impact on JW's financial status will be the Water Demand Management Programme – which will produce financial water savings at the current bulk-tariff rates of about R427.5 million/annum collectively. This will be from pressure management, pipe replacement and the installation of prepaid meters.

Preface to Tables 1A & 1B:

The strategy to reduce technical and non technical distribution losses is to install prepaid meters in deemed consumption areas in Soweto, Region D and at City Wide.

Key Programmes have been prioritised comprising of:

- Pipe Replacement Programme of old asbestos cement pipes, (> 65 years)
- Pressure Management focusing on areas with system pressure from 5 bar to 9 bar
- Installation of smart water meters in the middle to high income customer category, to improve billion errors, reduce losses etc..

All these projected interventions are expected to yield an estimated ROI of R427 million by 2016/17. This will reduce the levels of unplanned water-supply interruptions and improve customer services. On the other hand an additional 190 000 households could be supplied with water – assuming the current water demand of 536 Mm3 p.a. This could be used to support housing-development projects in the various growth nodes within the City of Johannesburg. Going forward the cumulative impact of these programmes will ensure that the City will be able to support and sustain the identified and prioritised Transit- Oriented Development (TOD) without having to defer further developments.

Success of these programmes is dependent on the City leveraging its strong balance sheet position and partnering with private sector and other providers of capital for investment funding.

Assumptions:

- Average household size of 3.14 (determined from the 2011 Census population of 4.4 million people – constituting 1.43 million households)

Level of Investment and Return on Investment:

- The level of investment in increasing capacity is R1.195 billion up to 2016/17– to unlock socio-economic development and realise a return of an estimated 225 000 household equivalents (h.h.e.)
- A corresponding investment of R619 million is earmarked for the refurbishment of existing assets to meet the statutory waste-water compliance standards.

Other Implicit Returns on Investment:

- Making viable the embedded Waste-to-Energy initiatives
- Composting with links to the agricultural sector being possible (food security)
- Based on a conservative estimate of 12 equivalent full-time jobs per million Rand (6 direct and a further 6 indirect or induced) – where labour-intensive methods are appropriate for civil-engineering works – much greater levels of employment are attainable (approximately 25 jobs per million Rand).

Table 1A: Key Programmes per CoJ Regions

ITEM	PROGRAMMES	PROJECT NAME	2013/14 R 000	2014/15 R 000	2015/16 R 000	2016/17 R 000	RETURN ON INVESTMENT	COJ REGION
1	**Un-accounted For Water (UFW)**						Improve Water Revenue	
	Reduction of technical and non-technical water losses	Soweto Infrastructure Upgrade & Renewal (Prepaid Meters)	232 812	234 256			Reduction of water losses. Total water savings of 36 000 Ml per annum (R 182 Million Water Savings per annum at a current rate of R 5.04/kl)	D
	(Target-2% Reduction of UFW per year) (From 29% to 22% in 2016)	Pipe Replacement	156 012	228 000	256,000	351 500	Reliability of services due to reduction of pipe bursts	City Wide
		PRV *(R 16.9 million from operating budget in the next 4 years)*	23 200	49 120	39 198	39 514	Potential Water savings of R 35 843 Ml per annum (which is equivalent to R 180 Million/year)	City Wide
		Smart Meters	20 000		398 005	485 000	Improve Water Revenue. Improve customer satisfaction levels	City Wide
2	**Bulk Waste Water Treatment Works (BWWTW)**							
	Protection of environment, reduction of nature contamination and promotion of economic development	Olifantsvlei Module 3 Unit 3, 50 Ml/d	18 282	19 500	151 700	161 700	Treatment capacity upgrade for 50 000 HH equivalent	D & F
		Bushkoppies Aeration 48 Ml/d	111 540	29 000	53 970	50 000	Treatment capacity upgrade for 48 000 HH equivalent	D
	(Target-Achievement of Green Drop Certification in all WWTW)	Goudkoppies (Refurbishment) 150 Ml/d		21 750	56 060	1 000	Treatment service continuity	D & F
		Northern Works (Refurbishment) 460 Ml/d	37 400	58 000	91 600	185 000	Treatment service continuity	A,B,C & E
		Driefontein (Upgrade from 35 Ml/d to 55 Ml/d)	165 347	50 700	1 040	1 040	Treatment capacity upgrade for 25 000 HH equivalent	C
		Lanseria 50 Ml/d	20 000	120 000	130 000	120 000	Treatment capacity for 50 000 HH equivalent	C
		Ennerdale		1 900	6 030	6 030	Treatment service continuity	G
		WWTW General	52 240	3 000	0	0	Treatment service continuity	City Wide

Table 1A: Key Programmes per CoJ Regions (continues)

ITEM	PROGRAMMES	PROJECT NAME	2013/14 R 000	2014/15 R 000	2015/16 R 000	2016/17 R 000	Return On Investment	COJ REGION
3	**Service Storage**							
	Increase water storage capacity for housing development and promote economic development	Diepsloot Reservoir 20 Ml	35 000				Additional water storage for 13 346 h/h equivalent	A
		Lanseria Reservoir 20 Ml	23 200				Additional water storage for 13 346 h/h equivalent	A
		Lion Park Reservoir 20 Ml		25 000	5 000	10 000	Additional water storage for 13 346 h/h equivalent	C
		Carlswald Reservoir 10 Ml		5 000	15 000		Additional water storage for 6 673 h/h equivalent	A
		Kensington Reservoir 15 Ml		6 000			Additional water storage for 10 010 h/h equivalent	F
		Robertsville Tower 2.25 Ml		3 000			Additional water storage for 1 501 h/h equivalent	F
		Zandspruit Reservoir 25 Ml		5 000			Cater for an additional 16 683 h/h equivalent	C
		Main Reef 50 Ml		10 000	30 000	20 000	Cater for an additional 33 366 h/h equivalent	D
		Orange Farm High Level Reservoir 35 Ml		20 000	15 000		Storage capacity upgrade for 23 356 h/h equivalent	G
		Lenasia High Level Reservoir 35 Ml		10 000	5 000		Storage capacity upgrade to 7 341 h/h equivalent	G
		President Park Reservoir 50 Ml			18 000	10 000	Storage capacity upgradefor 33 366 h/h equivalent	F
		Lawley High Level Reservoir 10 Ml			5 000		Storage capacity upgrade for 6 673 h/h equivalent	G
		Ennerdale Lawley Reservoir & Tower			27 000	15 000	Storage capacity upgrade for 13 346 h/h equivalent	G
		Blue Hills Reservoir 23 Ml				10 000	Storage capacity for 15 348 h/h equivalent	A
		Halfway House Reservoir 20 Ml				5 000	Storage capacity upgrade for 13 346 h/h equivalent	A
		Crown Gardens Reservoir 16 Ml				5 000	Storage capacity upgrade for 13 728 h/h equivalent	F
4	**Sewer Networks**							
	Sewer Pipe Replacement & Upgrade	City Wide	69 500	155 000	198 500	387 500	Replacement & upgrading of 800 km sewer main Promotion of clean living environment, free from sewer contamination	City Wide

Table 1B: Return on Investment of Programmes

Programmes (Multi-pronged strategy)	Portfolio and Project Names	Capital Investment Plan (R mill)				Return On Investment	Anticipated Payback Period					Output/Outcome	CoJ REGION
		2013/14	2014/15	2015/16	2016/17		2013/14	2014/15	2015/16	2016/17	2017/18		
Water Reserviour Service Storage Capacity Augmentation													
Water Reservoirs' Storage Capacity and ensure 24-hour supply service	Diepsloot Reservoir 20 Ml	R35				Additional water storage for 13 346 h/h equivalent						**Water storage capacity for housing development and promoting economic development**	A
	Lanseria Reservoir 20Ml	R23.2				Additional water storage for 13 346 h/h equivalent							A
	Lion Park Reservoir 20 Ml		R25	R5	R10	Additional water storage for 13 346 h/h equivalent							C
	Carlswald Reservoir 10Ml		R5	R15		Additional water storage for 6 673 h/h equivalent							A
	Kensington Reservoir 15Ml		R6			Additional water storage for 10 010 h/h equivalent							F
	Robertville Tower 2.25Ml		R3			Additional water storage for 1 501 h/h equivalent							F
	Zandspruit Reservoir 25Ml		R5			Cater for an additional 16 683 h/h equivalent							C
	Main Reef Reservoir 50Ml		R10	R30	R20	Cater for an additional 33 366 h/h equivalent							D
	Orange Farm HL Reservoir 35Ml		R20	R15		Storage capacity upgrade for 23 356 h/h equivalent							G
	LenasiaHL Reservoir 11 Ml		R10	R5		Storage capacity upgrade to 7 341 h/h equivalent							G
	President Park Reservoir 50Ml			R18	R10	Storage capacity upgradefor 33 366 h/h equivalent							F
	Lawley High Level Reservoir 10Ml			R5		Storage capacity upgrade for 6 673 h/h equivalent							G
	Ennerdale Lawley Reservoir 20 Ml			R27	R15	Storage capacity upgrade for 13 346 h/h equivalent							G
	Blue Hills Reservoir 23Ml				R10	Storage capacity for 15 348 h/h equivalent							A
	Halfway House Reservoir 20Ml				R5	Storage capacity upgrade for 13 346 h/h equivalent							A
	Crown Gardens Reservoir 16 Ml				R5	Storage capacity upgrade for 13 728 h/h equivalent							F
	Water Reservoirs' Sub-Total	**R58.2**	**R84**	**R128**	**R75**	**Storage capacity upgrade for 231 731 h/h equivalent**							
Sewer Networks' Pipe-Replacement Programme													
Sewer Pipe Replacement & Upgrade	City-Wide	R69.5	R155	R198.5	R387.3	Sewer-pipe replacement and upgrading of 800 km sewer mains to reduce City's average level of 6 x blockages per 100 km – to about 2 x blockages per100 km.						• **Promotion of clean living environment, free from sewer contamination.** • **Reliability of services due to reduction of blockage incidents**	City-wide
	Sewer Pipe Sub-Total	**R69.5**	**R155**	**R198.5**	**R387.3**								

Table 1B: Return on Investment of Programmes (continues)

Programmes (Multi-pronged strategy)	Portfolio and Project Names	Capital Investment Plan (R mill)				Return On Investment	Anticipated Payback Period					Output Outcome	CoJ REGION
		2013/14	2014/15	2015/16	2016/17		2013/14	2014/15	2015/16	2016/17	2017/18		
Unaccounted-For-Water (UFW) Reduction from current 29.4% to 2% NRW – by 2016/17													
Reduction of technical and non-technical water losses and water demand	Prepaid Metering in deemed consumption areas (Soweto)	R232,8	R234,2			R182 mill p.a. water saving at a current bulk tariff of R 5.04/ kl						• Reduction of water demand, and water saving of 36 000 Ml p.a.	D
	Water Networks' Pipe Replacement	*R156*	R228	R256	R351,5	R6.5 mill p.a. water saving at current bulk tariff of R 5.04/ kl						• Reduction of water demand by 1296 Ml p.a. • Reduce UFW from current 29.4% to 20% by 2016/17	City-wide
	Distribution Network Pressure Management	R23.2	R49,1	R39,2	R39,5	R180 mill p.a. water saving at current bulk tariff of R5.04/kl						• Reduction of water demand and savings of 35 843 Ml p.a. • Reduce Minimum Night Flow (MNF) and frequency of pipe bursts from 0.015/km/yr to 0.008/km/yr – from reported and unreported bursts • Reduce unplanned service interruptions	City-wide
	Smart Water Meters	R20		R398	R485	Improved water revenue and customer services						• Reduce metering and billing errors and improve both revenue and customer services.	City-wide
	Subtotal	**R432**	**R511,3**	**R398**	**R776**	**R427**							

Table 1B: Return on Investment of Programmes (continues)

Programmes (Multi-pronged strategy)	Portfolio and Project Names	Capital Investment Plan (R mill)				Return On Investment	Anticipated Payback Period					Output Outcome	CoJ REGION
		2013/14	2014/15	2015/16	2016/17		2013/14	2014/15	2015/16	2016/17	2017/18		
Infrastructure Upgrade													
Upgrading and Rehabilitation of existing Bulk Wastewater Treatment Works to increase both organic loading and hydraulic capacity, maximise generation of methane gas, and produce A1a-grade compost	Olifantsvlei Module 3 Unit 50 Ml/d	R18.3	R19.5	R151.7	R161.7	Treatment capacity upgrade for 50 000 HH equivalent						• Protection of environment • Unlock socio-economic development in the economic zones • Compliance and Green-Drop Status	
	Bushkoppies Aeration 48 Ml/d	R111.5	R29	R53.9	R50	Treatment capacity upgrade for 48 000 HH equivalent						• Protection of environment • Unlock socio-economic development in the economic zones • Compliance and Green-Drop Status	
	Goudkoppies (Refurbishment)		R21.8	R56.1	R100	Treatment service continuity						• Compliance and Green-Drop Status	
	Northern Works (Refurbishment)	R37.4	R58	R91.6	R185	Treatment service continuity						• Compliance and Green-Drop Status	
	Driefontein (Upgrade 25 Ml/d)	R165.3	R50.7	R1.04	R1.04	Treatment capacity upgrade for 25 000 HH equivalent						• Protection of environment • Unlock socio-economic development in the economic zones • Compliance and Green-Drop Status	
	Lanseria 50Ml/d	R20	R120	R130	R120	Treatment capacity for 50 000 HH equivalent						• Protection of environment • Unlock socio-economic development in the economic zones • Compliance and Green-Drop Status	
	Ennerdale		R1.9	R6	R6	Treatment service continuity						• Compliance and Green-Drop Status	
	WWTW General	R52.2	R3	0	0	Treatment service continuity						• Compliance and Green-Drop Status	

Table 1B: Return on Investment of Programmes (continuation of 1C)

Programmes (Multi-pronged strategy)	Portfolio and Project Names	Capital Investment Plan				Return On Investment	Anticipated Payback Period					Output/ Outcome	CoJ REGION
		2013/14	2014/15	2015/16	2016/17		2013/14	2014/15	2015/16	2016/17	2017/18		
Public Education and Awareness Programmes													
Public Education and Awareness Programme to promote Johannesburg Water, as well as change consumer behaviour on water conservation and use of sewerage networks	Water Conservation Billboards north of Johannesburg	R4m	R4m	R4m	R4m	A community that understands the important of saving water						Community empowerment and information dissemination, education, awareness on water conservation, customer services' charter, social compact, and community rights and responsibilities.	North of the City
	Campus tours to talk to students about water conservation	R350k	R350k	R350k	R350k	Target and empower younger generation to become current and future ambassadors on matters pertaining to water services and conservation.							University of Johannesburg Campus
	Radio Campaigns with both regional and local radio stations	R2.4m	R2.4m	R2.4m	R2.4m	Create a platform for dialogue and for clarification on water services' delivery messages, challenges and demand-side management							City-wide
	Mall Campaigns	R700k	R750k	R800k	R800k	The residents will have access to information and one-on-one interaction							
	Taxi Advertising	R300k	R300k	R300k	R300k	JW's visibility as part of awareness creation and stakeholders' empowerment programmes (community buy-in and partnership)							
	Water Conservation Publications	R750k	R750k	R700k	R7000k	Documented communication that residents can keep and benefit from							
	Alive Advertising	R800k	R800k	R800k	R800k	Public awareness and empowerment that results in behavioural changes							

Table 1B: Return on Investment of Programmes (continues)

Programmes (Multi-pronged strategy)	Portfolio and Project Names	Capital Investment Plan				Return On Investment	Anticipated Payback Period					Output/ Outcome	CoJ REGION
		2013/14	2014/15	2015/16	2016/17		2013/14	2014/15	2015/16	2016/17	2017/18		
Public Education and Awareness Programmes													
	Extensive Public Education on water conservation	R10.7m	R10.65m	R10.65m	R10.65m	Improve behavioural change and reduce water wastage						A baseline assessment on the existing water wastage would be determined – then followed by an education and awareness programme in the identified areas and the impact on demand-side management would be measured.	City Hotspot areas, including Diepsloot, Orange Farm, Ivory Park & Soweto
	Public awareness campaigns on misuse and vandalism of infrastructure – especially sewer networks	R6m	R6m	R6m	R6m	Improve behavioural change and reduce abuse of infrastructure						Existing baseline sewer blockages at the hotspot areas – which are in the order of 18 incidents per km – reduced to the City average of 5.5 incidents per km, improving customer service experience, and repeated blockage clearance and reduction of operating expenditure.	
	Sub-Total	**R26m**	**R26m**	**R26m**	**R26m**								

1 Chapter 1: Introduction

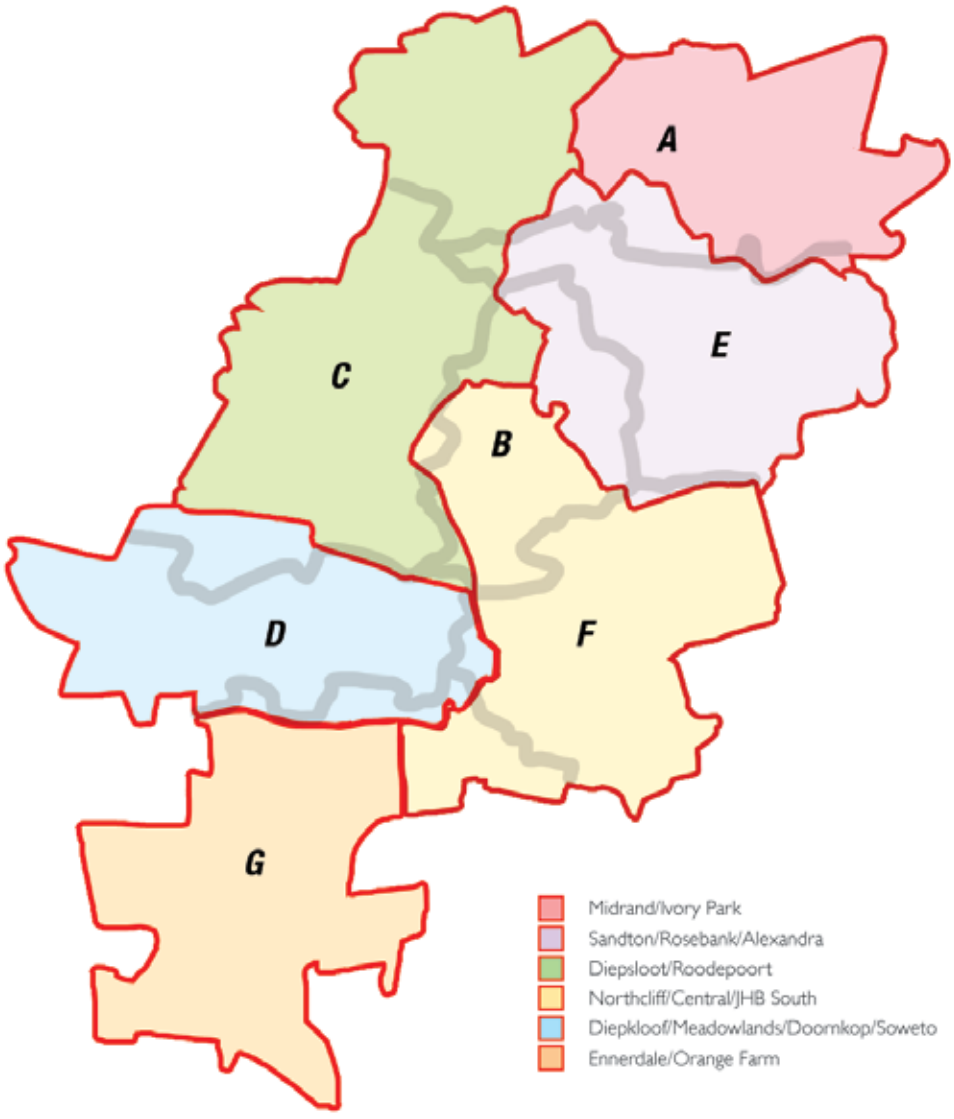
1.1 Background and Mandate

JW was established in January 2001 as an independent company with the CoJ being the sole shareholder. The entity was established as a Water Services Provider to the CoJ, to undertake the legislative mandate of providing water and sanitation services within the jurisdiction of CoJ. The entity supplies water and sanitation services to an area stretching from Orange Farm in the south, Midrand in the north, Roodepoort in the west and Alexandra in the east. It operates in seven (7) CoJ Regions, with ten (10) network depots and six WWTWs.

Since its establishment the entity has provided services associated with business principles – ensuring customer satisfaction and accelerated delivery of water and sanitation services. JW has provided residents throughout CoJ with improved levels of service and additional water connections in areas that did not have water and sanitation coverage before.

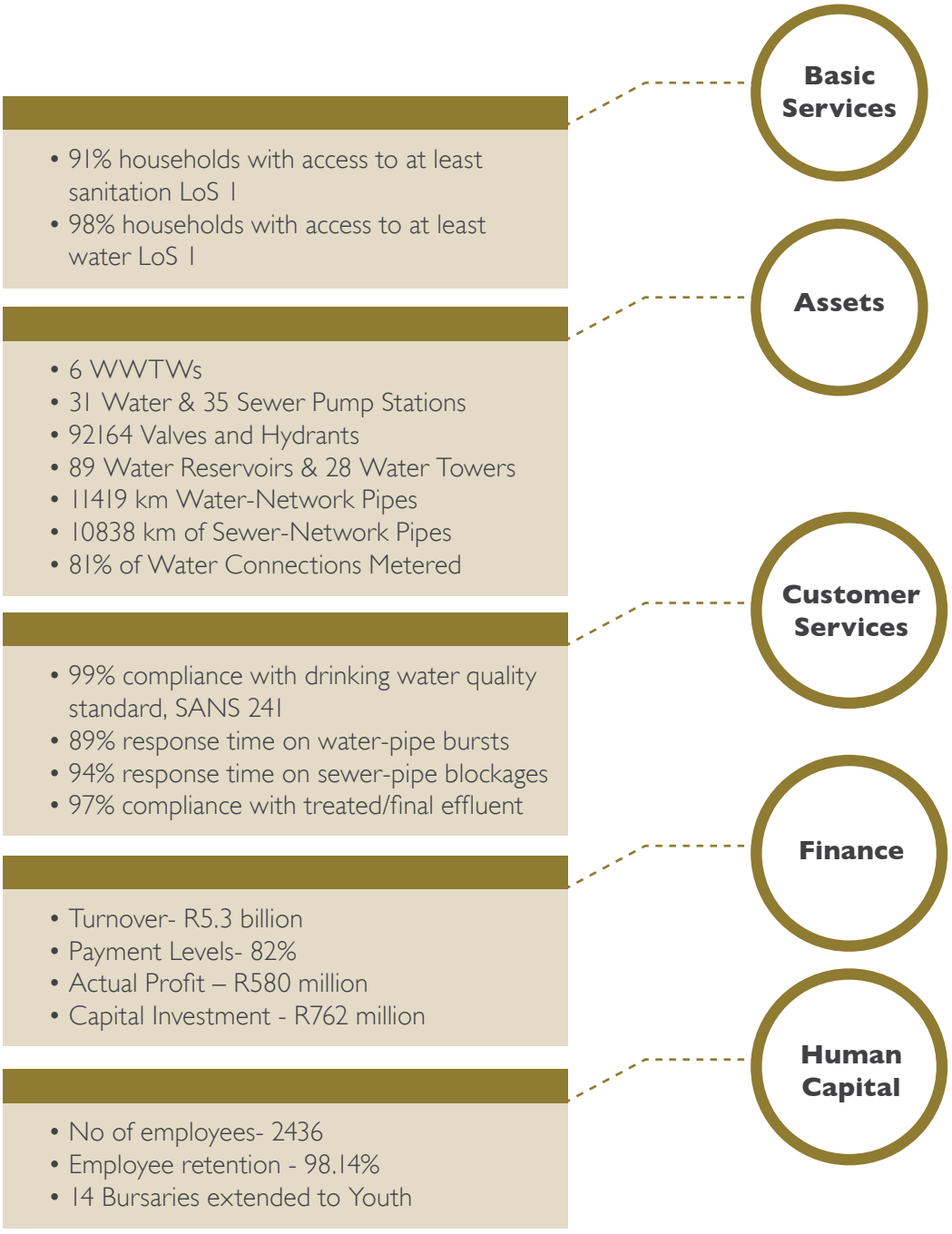
Map of City of Johannesburg And Johannesburg Water Regions

CoJ Regions



A	Diepsloot, IvoryPark, Midrand, Kya Sand
B	Randburg, Rosebank, Emmarentia, Greenside, Melville, Northcliff, Parktown
C	Roodepoort, Constantia Kloof, Northgate
D	Doornkop, Soweto, Dobsonville, Protea Glen
E	Alexandra, Wynberg, Sandton
G	Orangefarm, Ennerdale, Lenasia

1.2 JW at a glance: As at June 2012



1.3 Vision, Mission and Values of JW

In 2011 the CoJ developed an inclusive GDS 2040 which articulates the City's vision by 2040 and the adoption of a common vision for the future of CoJ. The City's vision is *"A world Class African City of the Future- a vibrant, equitable African City, strengthened through its diversity, a city that provides real quality of life, a city that provides sustainability to all its citizens. A resilient and adaptative society".*

The 2013/14 BP is informed by JW's vision and mission statements together with the defined values. The BP also stems from the categorised CoJ Priorities with the outcomes to be realised in the short, medium to long-term and with five key priorities achieved by 2015/16.

Our Vision:

"To be a World-Class African, Water and Sanitation Utility"

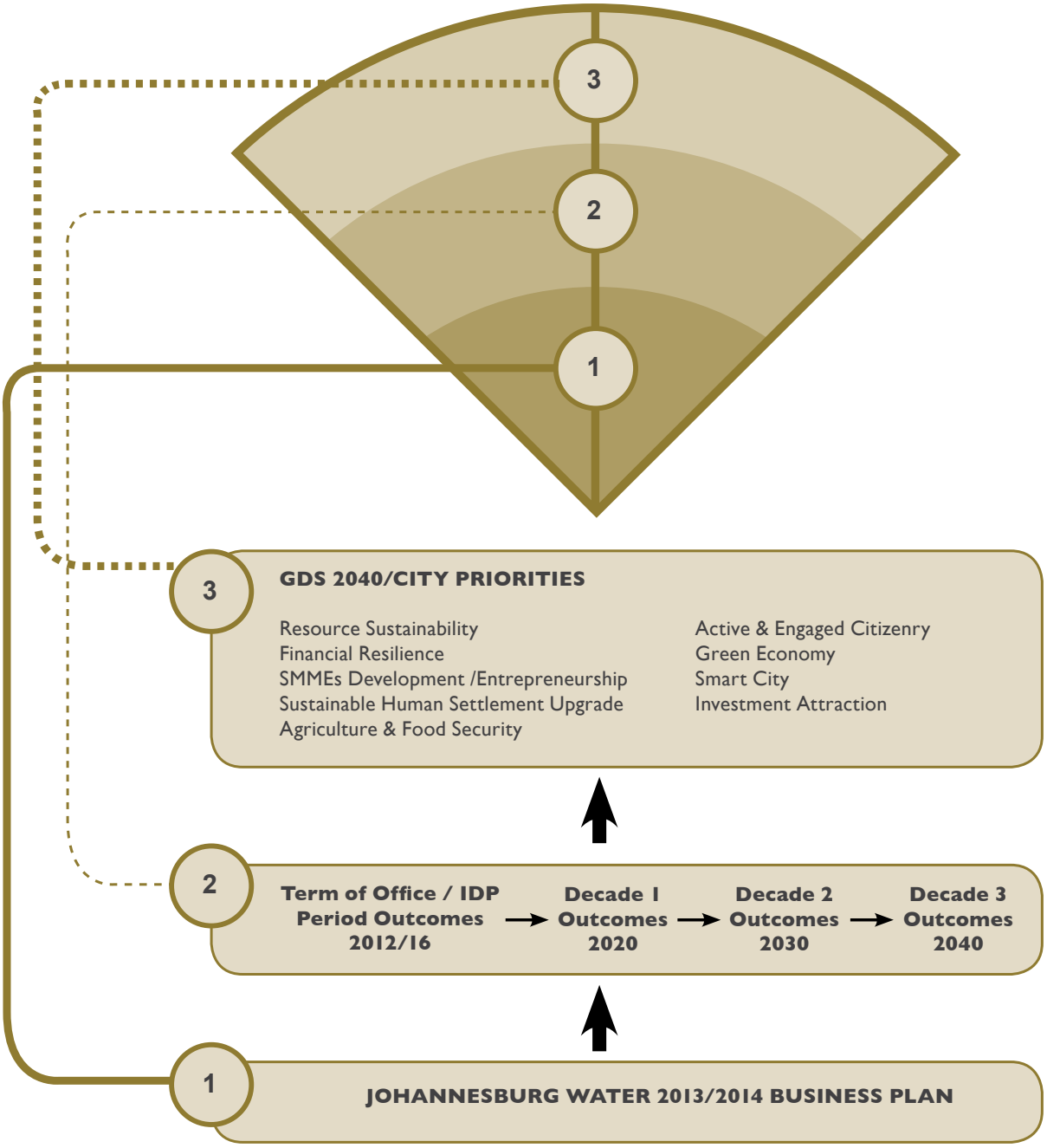
Our Mission is to provide all CoJ citizens with Quality Water and Sanitation services by:

- *Delivering a sustainable, affordable and cost-effective service*
- *Upgrading services in marginalised areas*
- *Creating a customer-focused culture*
- *Valuing and developing employees to build a sustainable capacity*
- *Safe-guarding the health and safety of JW employees, contractors and the general public*
- *Improving the protection of the environment*
- *Managing assets and leveraging on technology to enhance the level of security and quality of supply*

Our Corporate Values are to:

- *Treat customers, employees, suppliers, role players and stakeholders with respect, compassion and dignity*
- *Harness the power of diversity in an environment that provides equal opportunity and that is non-discriminatory*
- *Reward fairly for exceptional performance and innovation*
- *Achieve cost effectiveness through technical excellence and innovation*
- *Demand honesty and integrity from every employee and supplier of goods and services*
- *Promote ethical behaviour and endorse zero-tolerance on corruption and fraudulent conduct*
- *Be an employer of choice in which individuals and teams are able to develop their potential and growth in their careers.*

1.4 Alignment of JW Business Plan with City Priorities

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2

Chapter 2: STRATEGIC ANALYSIS & BUSINESS RISKS

The 2013/14 BP is informed by a number of internal reviews such as Company Health Checks, annual performance reviews that have been undertaken in order to ensure JW functions effectively and efficiently in the provision of water and sanitation services. The plan is also informed by relevant legislative requirements and the CoJ Customer Charter, which advocates for providing services in a more sustainable way. PESTEL and SWOT Analysis have been undertaken and key factors of the analysis have been considered in the Business Plan.

The following key drivers have been identified as Strategic Business Risks & Challenges on which this Business Plan is premised. The mitigation plans to address these challenges are reflected under the implementation section, categorised per CoJ.

2.1 Financial Sustainability & Viability

The budget provision for bad debts for the current financial year is R 722 million which is based on payment levels of 88%. The high bad debt requirement impacts negatively on the liquidity of JW.

Given the current actual payment levels achieved JW considered a payment levels of 86% to be realistic, however for 2013/14 CoJ has committed payment levels to be at 92% which allows JW to reduce its bad debts provision to 8% in 2013/14.

JW aims not to be fully reliant only on its internal funding in 2013/14 the organization will look at the feasibility and capability of leveraging from other sources of funds through PPP, collaborating with other National departments on implementation of national programmes and grant funding support from international donors.

2.2 Inadequate standards of service delivery, transition from LoS 1 to Full-Services

There are still unacceptable conditions of living especially within Informal Settlements where the basic level of services LoS 1 has not been met, especially with regards to sanitation services.

There are still pockets of areas within the informal settlements where there is a need to upgrade informal settlements above the LoS 1 to LoS 3, such that the CoJ moves towards sustainable human settlements.

2.3 Deficiencies in Personnel Skills and Capacity

There are growing concerns on the levels of literacy within the operational staff located at the Depots. JW is facing significant changes in workforce demographics and skills demand. Looking at this five year plan, in the medium term JW will require up-scaling of skills related to technology, project management and other range of technical skills to support the planned Capital Programmes.

The City is gearing itself into being a Smart City as articulated in the Joburg GDS 2040. JW has identified initiatives that will be implemented to contribute towards the Smart City initiatives. This will therefore require a cadre of technology-wise workforce to manage and maintain the smart metering that JW will implement. Artisans Development Programme will be implemented to ensure that JW has the required skills and personnel that will assist in the maintenance of infrastructure.

2.4 Infrastructure Maintenance Backlog

In light of the ageing infrastructure challenges as a result of poor maintenance, the entity requires capital investments that are in the range of R 25 billion over the next 10 years up to 2021/22. The key infrastructure development programmes are comprised of projects that will have a return on investment, not necessarily of a financial nature, but of an environmental or social nature.

2.5 Rapid Urbanisation & Growth in population

The CoJ is increasingly under pressure due to population growth with a total population as at 2011 of 4,4 million. CoJ population grew by 20.5% between 2001 and 2007 and by 14% between 2007 and 2011. Over the ten-year period from 2001 to 2011, CoJ population increased by 37% . Due to high levels of migration towards the CoJ area, JW will continue to face up with the challenges of ensuring that the water infrastructure can serve the expected demand. The Capacity of Sewer Networks and WWTW is getting outstripped. Therefore more focus on expansion of treatment plants as well as construction of new infrastructure as part of the 10-year Capital Plan seeks to address these risks.

2.6 Water Demand Management

The CoJ's water demand is continuously increasing in line with the population and economic growth. The current annual demand as at June 2012 is at 536 000 Ml. This growth in demand cannot be sustained out of the Vaal Dam without any augmentation of the water supply into the Upper Vaal Catchment. In the 2012/13FY, JW has devised an accelerated WC-WDM Strategy to mitigate this risk. The strategy has identified interventions such as pressure management, active leakage control, pipe replacement, installation of prepaid meters and citizen's engagement programmes especially in vulnerable areas termed hot-spot where there are high levels of wastages, as means to reduce water demand.

2.7 Acid Mine Drainage

Rand Water and the Department of Water Affairs advised that since the AMD project is a National competence and responsibility of DWA in terms of the National Water Act, the City of Johannesburg (CoJ) and Johannesburg Water (JW) can only actively participate as a stakeholder in terms of Intergovernmental Relations Act. DWA has established Stakeholder and Interested and Affected Parties (I &AP) forums.

DWA has also established an Inter-Ministerial Committee under the Coordination of the Council for Geosciences with a team of Experts drawn from the Council for Geosciences, Department of Water Affairs and Department of Mineral Resources, Council for Scientific and Industrial Research, Mintek, Water Research Commission and advisors from universities of Witwatersrand, Free State, Tshwane University of Technology and Walter Sisulu. The company, together with the CoJ EISD department will participate as I &APs. This would provide reliable information from these meetings on DWA strategy and progress in respect of AMD.

JW will configure its testing protocols at WWTWs to detect heavy metals, this will indicate the infiltration in the network.

2.8 PESTEL Analysis

The macro-environment as reflected on the PESTEL analysis in Table 2 below, provides a global picture of issues that have a potential impact on JW's business. The issues as highlighted in the analysis below, are external factors; however JW has identified response strategies for each issue.

Table 2: PESTEL and Response Strategies

PESTEL Category	JW Response Strategies
Political	
Contribution to National challenge of unemployment	Expand on the EPWP Programme and upscale targets for the SMME Programme
Economical	
Global Economic Crisis	Explore initiatives to maintain affordable water tariffs
Social	
Different Segments of customers with different needs	Appropriate solutions/services offered according to classification of customers
Increase of Illegal Connections and mis-use of sewer infrastructure	Communities engaged through educational programmes and increased communication – to influence behavioural change
Technological	
Emerging Technologies	Explore new digital opportunities, such as e-models in water management and communication
IT Project Systems	Create more function service facilities, such as the online job cards system and call centre Information Management System, designed and implemented to support integrated reporting
Environmental	
Environmental Protections and Conservation	Explore green technology such as Photovoltaic panels in wastewater treatment works and depots Move towards a paperless-environment internally
Growing focus on future Security of Water Supply and Resource Management	Enhance WCWDM Strategy in line with projected future growth Expand on BTE in other WWTW
Environmental and Quality Standards	Explore implementation of ISO quality systems (9 000, 14 000 and 18 000)
Growth in water demand aligned to the National Water Resources Strategy	Water Use Efficiency Programmes focusing on community education and awareness Enhance WC-WDM Strategy in line with projected future growth
Legislative	
By-laws	Educate the public on revised by-laws relating to illegal connections and efficient use of water, such as time for irrigation.
Compliance to relevant Acts related to water	Ensure compliance to all relevant Acts that relates to JW business

2.9 SWOT analysis

Strengths (S) and Weaknesses (W) are considered to be internal factors over which JW has some measure of control of and Opportunities (O) and Threats (T) are considered to be external factors over which JW has essentially no control of. However, key plans have been committed to be implemented as a response to the identified weaknesses in Table 3.

Table 3: Identified Strengths, Weaknesses, Opportunities and Threats

JW will maximise on the opportunities that have been analysed and take advantage of them in the implementation of internal strategies. New technologies present opportunities which will enable JW to come up with innovative ways to communicate and engage with customers, through social media etc.

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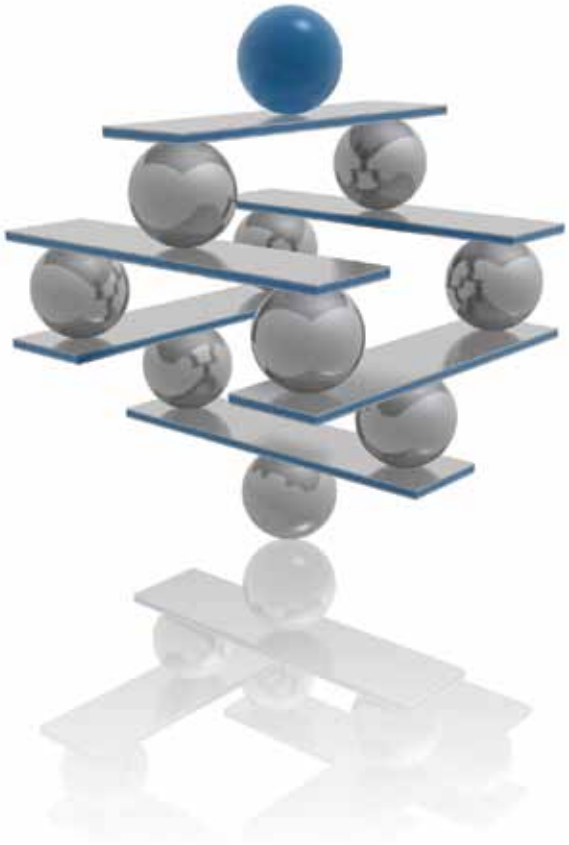
JW has diverse customer needs and this allows for capitalisation on tailor making communication mechanisms that suit each segment/type of customers, such as communication targeted to youth and adults, in languages that will be understood by all types of customers.

Rising electricity prices continues to be a risk to JW Business, as a lot of operations are reliant on energy supply. The BTE which is used as a fuel source to generate electricity will promote low consumption of energy in WWTWs. This technology will be expanded to other WWTWs in the medium-to-long term.

Security of supply refers to the reliable availability of an acceptable quantity and quality of water for health, livelihoods and production, coupled with an acceptable level of water-related risks. Although South Africa uses a relatively high proportion of its available water, studies have shown that there is enough water to meet all the country's needs until 2025 and beyond.[1] Present problems and future challenges are related mainly to limited financial resources and dilapidated water infrastructure, rather than to limitations of the resource itself. WC-WDM is implemented to ensure that the demand vs. the supply is managed.

One of JW's achievements in the last 10 years has been compliance to drinking water quality and final effluent standards. JW will continue to build on such strengths and to maintain the high levels of compliance for both drinking water and wastewater effluent. JW has an infrastructure backlog of R 6.7 billion, this backlog has been impacted by the progressive shortfall in capital funding over the last ten years. It is therefore critical to leverage capital funding from other sources.

One of JW's threats is the productivity levels of staff particularly at Depots and to a degree at head office. The productivity study that is undertaken will provides hot-spots areas and key interventions to improve productivity levels.



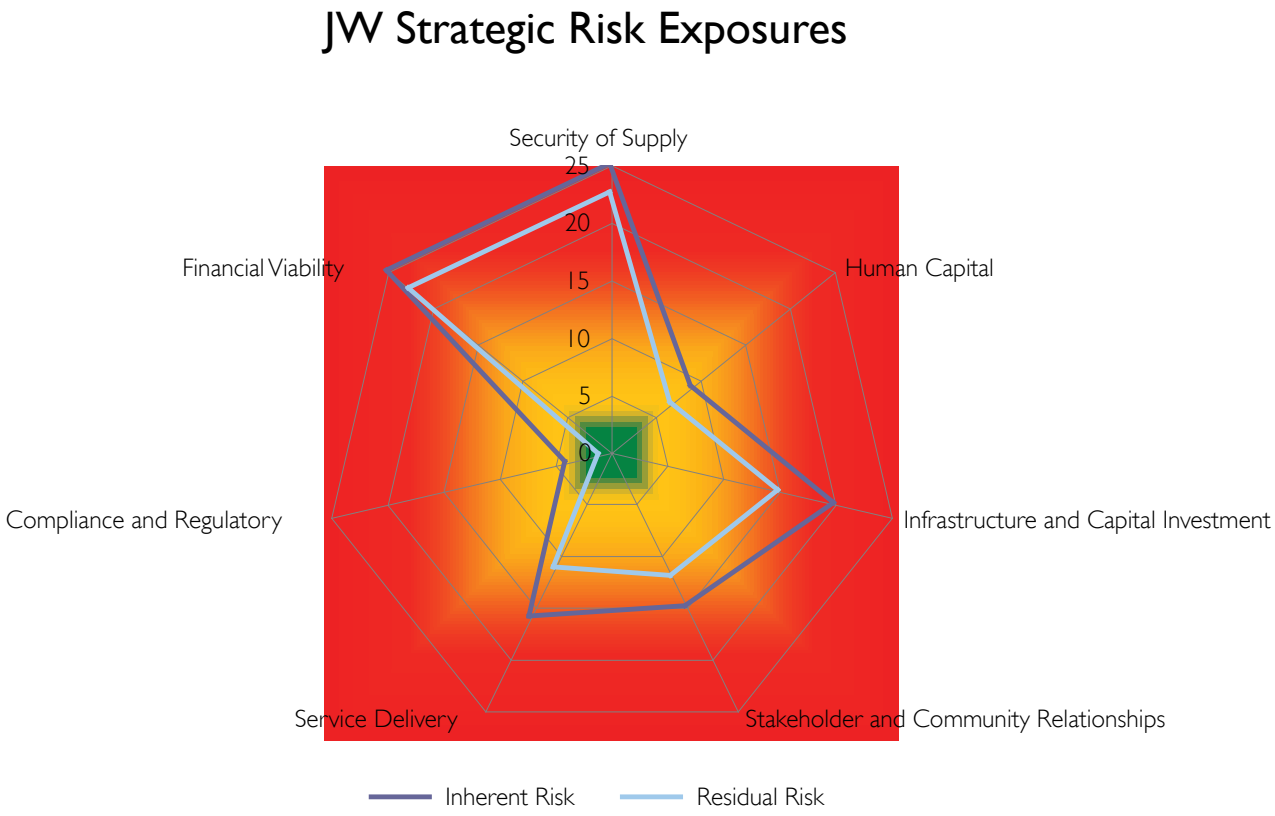
[1] Muller, M.*etal.*(2009): Water Security in South Africa; Working Paper Series No12.

3

Chapter 3: **Enterprise Risk Management**

While the business has had many inherent risks over the years, JW has successfully rolled out ERM across its business units and also operations to address strategic, financial, operational and hazard risks, in the context of the legal, regulatory and compliance environment. The current strategic risk exposure of the organization is depicted in figure 2 below.

Figure 2: Heat Map of strategic risks



To add value to the organization and the business-planning process, Enterprise Risk Management (ERM) will fulfil the following responsibilities:

- Facilitate organization-wide risk and opportunity identification and analysis
- Promote the management of risk in line with best practices at all levels in the organization
- Ensure alignment of JW's risk profile, plans and performance through combined assurance and integrated reporting
- Promote training in management of risks within different business units and across the organization
- Promote decision making and allocation of resources to respond to threats and risks
- Ensure enterprise-wide compliance with key regulatory and legal requirements
- Ensure resilience of JW operations through Business Continuity and Disaster Management Planning
- Provide emerging risk intelligence in respect of service-delivery projects and interventions.

The following Risk Matrix in Table 4 summarises the key challenges of delivering on objectives and mitigation approaches/responses.

Table 4: Risk Matrix and Mitigation Factors

Risk Register Ref. Number	Strategic Risk Description	Mitigation
110	**Financial Viability, Sustainability and Resilience** Threat to JW's business operations due to failure to understand and manage the full life-cycle cost of the business and to establish and maintain an effective balance between long-term debt, asset values, operations and maintenance expenditures(costs) and operating revenues.	• Financial Turn around Strategy - To ensure that JW fully covers operating costs through operating income and generate surpluses for investment in infrastructure (new and rehabilitations). • Management of agency arrangements with the City – to ensure billing and collection efficiency ratios of 86% or more. • Water loss Management -improve metering systems and minimize Non Revenue Water.
33	**Water Resources Management** The risk that water demand will exceed supply and the threat of inadequate water-resource management on JW's operations in part or in total, – negatively impacting on access to water goals, core business and national water use and saving targets.	• National Government Initiatives and Policies (DWA Project 15%) – Reduce demand to 450 000ML by 2015. • City-Wide Infrastructure Upgrades and Rehabilitation, including leak detection and pressure management to improve reliability of the network and reducing water losses through bursts and leaks. R1.020 billion will be invested in 2013/14. • City-Wide Communication Drive on water situation with the aim of forming partnerships with consumers to conserve water and influence change in attitude and behaviour. • Investigate Water Re-use Initiatives and other service and product innovations, including but not limited to effluent and acid mine water re-use.
34	**Capital Investments and Infrastructure Risk** The threat that JW's infrastructure will not have the required capacity and capability to deliver a reliable service on a sustained basis – in line with demand levels and the Customer Charter.	• Asset Management Programme to ensure that all assets are recorded and accounted for and their condition assessed – so that decisions in respect of capital investments are well informed and have as well-defined impact on service delivery, financial viability, the environment and economic growth and development. • Leveraging of other Funding Opportunities from third parties, which includes, but is not limited to, borrowing to raise the required resources. • PPPs Opportunity Exploration and the development of alternative and innovative funding models,e.g. Project and Infrastructure Finance Structure in line with relevant legislation.

Table 4: Risk Matrix & Mitigation Factors (continues)

Risk Register Ref. Number	Strategic Risk Description	Mitigation
35	**Human Capital Risk** Human Capital Risk arising from failures of the organization to manage its key risks as an employer, including lack of appropriate human resource, loss of skills due to retirement (aging workforce), failure to manage performance and reward, unauthorised or inappropriate employee activity and failure to comply with employment-related regulatory and legislative requirements.	• Monitoring the Age Profile of all key employees to ensure that continuity and skills' transfer plans are in place. In certain areas mentors are brought back on a needs' basis to focus on transfer of knowledge and skills. • Secure a Pipeline of Skills through apprenticeship programmes. • Succession planning at all levels. • Engineering Capacitation Programme to reduce skills' challenges for engineering. • Embedded Culture of Developing and Recognising employee potential across the board.
111	**Key Stakeholder and Community-Relationship Failure** Threat to service-delivery enhancement initiatives as a result of poor relationships and/or communication – leading to resistance and lack of support and ownership.	• Focus on Employee Satisfaction and the development of an "employer brand" • Engagement with Communities and their Leaders on water and sanitation and related issues aimed at encouraging participation and empowerment. • Publishing or Communicating Key Information – e.g. water quality, planned disruptions – on the company's website as a proactive approach to managing the relationship. Also use social media to communicate and disseminate information to customers. • Stakeholder Profiling to ensure the power, interest and influence dynamic are well known and used to best advantage – followed by skilling of management and staff to engage with stakeholders at various levels. • Identify and Correct Expectation Skills and Knowledge Gaps between councillors and communities (equipping the councillor to represent JW through continuous interaction and training).

4

Chapter 4: **Financial Impact & Performance**

The key driver for continued financial sustainability is to support service delivery. Service delivery is largely under pinned by a successful capital investment programme. It is therefore imperative to ensure a financial framework that generates the required cash flows to support capital investment. The 2011 census results published in October 2012 confirmed the view of strong urbanization, particularly in the Gauteng Area. The Company is directly impacted by this trend and the mix in terms of service delivery is relevant to financial planning.

The South African interest rate scenario impacts directly on the cost of funding and JW will be directly affected by interest rates sensitivity when procuring loan funding for its capital projects. Interest rates were reduced in July 2012 by 50 basis points when the repo rate reduced to 5% and the prime lending rate to 8.5%. With rates at 30-year lows, going forward the trend is likely to be an increase.

The recent downgrade by the various international rating agencies of the rating of the South African Government and various financial institutions has put the spotlight on the stability of the local economy. The impact is likely to be an increase in the cost of borrowing by all sectors in local economic activity. In addition; with foreigners being significant buyers of local bonds, the downgrading could result in funds being withdrawn, contributing to deterioration in the currency exchange rate.

The factors above impact either directly or indirectly on the business of JW. The prognosis for economic growth and financial stability however, remains cautiously positive. The resilience of the economy is partly demonstrated by the positive though volatile performance of the stock market. The Johannesburg Stock Exchange all share index achieved a record high in October, 2012.

4.1 Financial Performance

The actual profit for 2011/12 was R580 million, improving to an expected R776 million for the 2012/13 financial year. The five-year budget period assumes a profit of R1.1 billion for the 2013/14 financial year growing steadily to R1.8 billion for the 2017/18 financial year.

The proposed tariff increase for 2013/14 is 9.82% which is the same rate as the Rand Water proposed tariff increase of 9.82%. The tariff increase for the financial years 2014/15 to 2017/18 is predicated on a reasonable CPIX plus 2%. This will however be directly impacted by the Rand Water tariff increase. It is anticipated that should this increase be higher than inflation, Johannesburg Water would apply a tariff of 1% above the Rand Water tariff cost.

The payment level achieved for the 2012 financial year was 82%. The payment level factored into the 2012/13 budget was 88%. The medium-term budget however shows an improvement in the payment level rate of 92% in the 2013/14 financial year to 95% already in 2016/17. The funding for the capital investment assumes a combination of grant, loan and own funding. The level of own funding increases steadily over the period from 2013/14 to 2017/18.

The cash flow generated is adequate to finance the repayment of capital and interest on the loan funding required. The term of the loan is computed at a 10-year repayment period.

The financial scenario above meets the objective of financing the capital investment programme of R25 billion over a ten year period while maintaining tariff increases at reasonable rates. The cash generation is sufficient in order to meet working capital and other business requirements. The plan has factored in efficiencies in terms of maintaining reasonable cost structures while increasing revenue. The cash generation however, is dependent on efficient billing and an improvement from the present status in payment levels.

4.2 Proposed tariffs for the 2013/14 Financial Year

The proposed tariff increases for the 2013/14 financial year applicable to the various tariff bands are:

- Domestic Water and Prepaid Water and Sanitation
  - o >0 to 6kl n/a
  - o >6 to 10 kl 5.0%
  - o >10 to 15 kl 7.3%
  - o >15 to 20 kl 8.82%
  - o >20 to 30 kl 9.82%
  - o >30 to 40 kl 10.82%
  - o >40kl 11.32%
- Institutional and Industrial/Commercial
  - o Consumption up to 200 kl 9.82%
  - o Consumption exceeding 200kl 10.82%
- All Other Tariffs to be increased by 9.82%.

The budgeted average tariff increases for June 2015 and June 2016 are 7.3% and 7.0% respectively. The tariff increases are purely indicative, as no indication has been received from Rand Water about the increase in the cost of water for the 2015 and 2016 financial years.

Table 5: Proposed tariff increases for Water and Sanitation

Proposed Domestic Water Tariff- Metered Areas			
KL per connection p/m	**2012/13 Tariff (R/Kl)**	**2013/14 Tariff (R/Kl)**	**% Increase**
0-6	Free	Free	0
> 6-10	R5.56	R5.84	5.0
>10-15	R8.64	R9.27	7.3
>15-20	R11.86	R12.91	8.82
>20-30	R15.35	R16.86	9.82
>30-40	R16.13	R17.88	10.82
>40	R19.68	R21.91	11.32
Proposed Domestic Water Tariffs in Previously-Deemed Consumption Areas Fitted With Metered Connections (Pre-Paid Meters)			
0-6	Free	Free	0
>6-10	R4.30	R4.52	5.0
>10-15	R5.51	R5.91	7.3
>15-20	R9.83	R10.70	8.82
>20-30	R14.70	R16.14	9.82
>30-40	R15.46	R17.13	10.82
>40	R19.52	R21.73	11.32
Proposed Water Tariffs – Institutional			
Consumption up to 200	R13.81	R15.17	9.82
Consumption > 200	R14.18	R15.71	10.82
Proposed Industrial/Commercial Water Tariffs			
Consumption up to 200	R19.09	R20.96	9.82
Consumption >200	R19.60	R21.72	10.82
Proposed Private-Dwelling Domestic-Sanitation Tariffs			
ERF Size (m²)	**2012/13Tariff (R/erf/month)**	**2013/14Tariff (R/erf/month)**	**% Increase**
Up to and including 300	R98.70	R108.39	9.82
>300 to 1000	R192.13	R211.00	9.82
>1000 to 2000	R290.67	R319.21	9.82
Larger than 2000	R418.81	R459.94	9.82
Proposed Domestic Sanitation Tariffs in Previously-Deemed Consumption Areas			
Kl	**2012/13 Tariff Subsidised (R/Kl)**	**2013/14 Tariff Subsidised R/Kl**	**% Increase**
0-6	Free	Free	0
>6-10	R2.40	R2.52	5.0
>10-15	R3.02	R3.24	7.3
>15-20	R5.55	R6.04	8.82
>20-30	R8.47	R9.30	9.82
>30-40	R8.90	R9.86	10.82
>40-50	R11.06	R12.31	11.32
>50	R14.64	R16.30	11.32

The Income Statement, Balance Sheet and Draft Budget (see below) provide a view of the financial sustainability of JW for the next 5 years:

Income Statement

R '000's	*12mts* **2013/14 Yr (1)**	*12mts* **2014/15 Yr (2)**	*12mts* **2015/16 Yr (3)**	*12mts* **2016/17 Yr (4)**	*12mts* **2017/18 Yr (5)**
Revenues					
Operating Income Generated	**6,731,956**	**7,184,368**	**7,640,765**	**8,220,536**	**8,860,730**
Service charges - water and sanitation revenue from tariff billings	6,731,956	7,184,368	7,640,765	8,220,536	8,860,730
Cost of Sales	**(3,023,923)**	**(3,244,609)**	**(3,491,475)**	**(3,743,081)**	**(4,020,386)**
Bulk Purchases -Water	(3,023,923)	(3,244,609)	(3,491,475)	(3,743,081)	(4,020,386)
Gross margin	**3,708,034**	**3,939,759**	**4,149,289**	**4,477,455**	**4,840,343**
Gross Profit Margin %	**55.1%**	**54.8%**	**54.3%**	**54.5%**	**54.6%**
Total Other Revenue	**328,470**	**233,000**	**311,500**	**365,000**	**365,000**
Other revenue	328,470	233,000	311,500	365,000	365,000
Expenditure	**(2,602,001)**	**(2,769,772)**	**(2,885,432)**	**(2,982,265)**	**(3,185,769)**
Employee Related Costs -Wages & Salaries	(714,419)	(748,098)	(784,290)	(828,645)	(868,420)
Contracted Services	(583,489)	(629,323)	(666,843)	(699,552)	(735,282)
Gen.expenses - Other	(555,307)	(595,884)	(637,596)	(679,677)	(725,895)
Repairs & Maintenance	(19,269)	(20,676)	(22,163)	(23,626)	(25,233)
Depreciation	(224,643)	(272,900)	(316,094)	(338,406)	(386,463)
Contributions: Bad debts	(504,874)	(502,892)	(458,447)	(412,359)	(444,476)
Profit before interest & taxes	**1,434,503**	**1,402,987**	**1,575,357**	**1,860,189**	**2,019,574**
Net interest & sundry items	**(305,836)**	**(314,807)**	**(324,121)**	**(333,567)**	**(367,849)**
Interest income -Internal (COJ)					
Interest on COJ shareholder loans	(45,555)	(35,706)	(25,925)	(16,008)	(6,159)
Interest on Mirror conduit loans	(214,135)	(231,002)	(259,701)	(284,508)	(333,660)
Commercial interest payable	(46,146)	(48,099)	(38,495)	(33,050)	(28,030)
Profit for the year	**1,128,667**	**1,088,180**	**1,251,236**	**1,526,623**	**1,651,725**
Retained income at beginning of period	4,357,254	5,485,921	6,574,102	7,825,337	9,351,960
Retained income at end of period	**5,485,921**	**6,574,102**	**7,825,337**	**9,351,960**	**11,003,685**

Balance Sheet

R '000	BUDGET				
	2013/14	**2014/15**	**2015/16**	**2016/17**	**2017/18**
	Yr (1)	**Yr (2)**	**Yr (3)**	**Yr (4)**	**Yr (5)**
ASSETS					
Fixed assets (net book values)	**7,433,993**	**8,252,679**	**9,475,346**	**11,136,940**	**12,950,476**
Land and buildings	221,677	284,503	395,588	452,321	469,823
Plant & equipment	6,851,276	7,873,274	8,988,057	10,596,227	12,387,131
Motor vehicles - Other	50	24	-	-	-
Furniture and fittings	3,183	2,437	2,249	2,255	2,060
Office Equipment	5,478	3,926	2,605	1,383	327
Other fixed assets	352,329	88,515	86,847	84,754	91,135
Current assets	**2,800,568**	**3,184,886**	**3,746,277**	**4,202,857**	**4,389,517**
Service Debtors	8,107,735	8,364,817	8,570,717	8,523,665	8,513,321
Less: Provision for Bad Debts	(6,233,165)	(6,506,462)	(6,729,092)	(6,699,182)	(6,705,884)
Sundry Debtors	12,866	13,123	13,385	13,653	13,926
Inventory	49,221	51,928	54,784	57,797	60,976
Cash & equivalents	**690,531**	**1,090,441**	**1,624,848**	**2,074,248**	**2,275,899**
CoJ	173,217	170,870	211,458	232,490	231,087
Other UAC's of CoJ	162	169	177	185	193
Other current assets	-	-	-	-	-
Total Employment of Capital	**10,234,561**	**11,437,565**	**13,221,623**	**15,339,797**	**17,339,993**
EQUITY AND LIABILITIES					
Capital and Reserves	**5,485,922**	**6,574,103**	**7,825,338**	**9,351,961**	**11,003,686**
Share capital & premium	1	1	1	1	1
Retained income	5,485,921	6,574,102	7,825,337	9,351,960	11,003,685
Non-Current Liabilities	**2,431,651**	**2,397,435**	**2,681,871**	**2,974,459**	**3,275,057**
Mirror Conduit External loans	1,581,215	1,688,817	2,115,063	2,549,452	2,890,570
Shareholder Loan	194,976	129,984	64,992	-	-
Other External loans	565,026	487,310	409,594	331,878	290,442
Deferred Income	1,481	1,481	1,481	1,481	1,481
Defered Tax Liability	-	-	-	-	-
Employee benefit obligations	88,953	89,843	90,741	91,648	92,564

Current liabilities	**2,316,987**	**2,466,027**	**2,714,414**	**3,013,376**	**3,061,250**
Trade creditors	1,220,422	1,296,932	1,461,957	1,631,409	1,746,255
Accruals and provisions	71,075	72,497	73,947	75,426	76,935
Consumer Deposits - Services	165,732	167,532	169,332	171,132	172,932
Value Added Tax	357,149	408,394	444,167	464,748	477,005
CoJ	55,271	56,929	58,637	60,396	62,208
Other UAC's of CoJ	5,743	6,001	6,271	6,553	6,848
Current portion of non-current liabiliites	441,595	457,742	500,103	603,713	519,067
Other current liabilities	-	-	-	-	-
Total equity and liabilities	**10,234,561**	**11,437,565**	**13,221,623**	**15,339,797**	**17,339,993**

Cash Flow Statement

	BUDGET	**PROJECTION**			
	TOTAL				
	2013/14	**2014/15**	**2015/16**	**2016/17**	**2017/18**
R '000's					
Profit Before Interest and Taxes	**1,434,503**	**1,402,987**	**1,575,357**	**1,860,189**	**2,019,574**
Less: (Profit)/add:Loss on sales of assets					
Add: Depreciation	224,643	272,900	316,094	338,406	386,463
Less: Interest	-305,836	-314,807	-324,121	-333,567	-367,849
Cash generated from operations	**1,353,310**	**1,361,080**	**1,567,329**	**1,865,029**	**2,038,188**
Increase in net current assests	**250,856**	**164,632**	**221,402**	**291,784**	**62,864**
Net cash generated / (absorbed) from operations	**1,604,166**	**1,525,711**	**1,788,732**	**2,156,812**	**2,101,053**
Cash impact of capital expenditure	**-1,020,283**	**-1,091,586**	**-1,538,761**	**-2,000,000**	**-2,199,999**
Cash impact from financing activities	**-137,218**	**-34,216**	**284,436**	**292,588**	**300,598**
Net movement in cash position	446,665	399,910	534,407	449,400	201,651
Opening cash position	243,866	690,531	1,090,441	1,624,848	2,074,248
Closing net cash position	**690,531**	**1,090,441**	**1,624,848**	**2,074,248**	**2,275,899**

JOHANNESBURG WATER (SOC) LTD DRAFT MEDIUM TERM REVENUE AND EXPENDITURE BUDGET FOR 2013/14 - 2017/18	Medium Term Revenue and Expenditure Budget				
	Budget Year	Estimates	Estimates	Estimates	Estimates
	2013/14	2014/15	2015/16	2016/17	2017/18
	R 000	R 000	R 000	R 000	R 000
REVENUE					
Service charges - water revenue	4,241,132	4,526,152	4,813,682	5,178,937	5,582,260
Service charges - sanitation revenue	2,490,824	2,658,216	2,827,083	3,041,598	3,278,470
TOTAL OPERATING REVENUE	**6,731,956**	**7,184,368**	**7,640,765**	**8,220,535**	**8,860,730**
EXPENDITURE					
Employee related costs	706,736	739,938	775,608	819,564	858,905
Debt impairment	504,874	502,892	458,447	412,359	444,476
Depreciation & asset impairment	224,643	272,900	316,094	338,406	386,463
Repairs and maintenance	19,269	20,676	22,163	23,626	25,233
Interest Paid : External Borrowings	46,146	48,099	38,495	33,050	28,030
Bulk purchases	3,023,923	3,244,609	3,491,475	3,743,081	4,020,386
Contracted services	389,452	423,187	448,476	469,105	491,621
Other expenses	546,907	586,871	627,953	669,395	714,913
DIRECT OPERATING EXPENDITURE	**5,461,950**	**5,839,172**	**6,178,711**	**6,508,586**	**6,970,027**
Internal Transfers					
Interest on Shareholders Loans	45,555	35,706	25,925	16,008	6,159
Interest on Mirror Conduit loans	214,135	231,002	259,701	284,508	333,660
Internal Charges (ME's / Core)	210,120	223,308	236,693	249,810	264,159
Total Internal Transfers	**469,810**	**490,016**	**522,319**	**550,326**	**603,978**
TOTAL OPERATING EXPENDITURE	**5,931,760**	**6,329,188**	**6,701,030**	**7,058,912**	**7,574,005**
OPERATING SURPLUS / (DEFICIT)	**800,196**	**855,180**	**939,735**	**1,161,623**	**1,286,725**
Transfers Recognised					
Capital Grants	307,970	212,000	255,000	300,000	300,000
Capital Contributions	20,500	21,000	56,500	65,000	65,000
OPERATING SURPLUS / (DEFICIT)	**1,128,666**	**1,088,180**	**1,251,235**	**1,526,623**	**1,651,725**

5

Chapter 5: Implementation & Performance Overview for 2013/14 up to 2016/17

This section deals with the implementation of infrastructure projects in line with the strategic objectives of the company while conforming to the principles of the city's Growth and Development Strategy (GDS 2040).

JW's Infrastructure Asset Management Plan (IAMP) is used as the basis for preparing the organizations capital investment plans. The IAMP has been developed over the past 4 years and has vastly improved the organizations ability to identify and prioritize infrastructure upgrading and renewal projects.

The 2013/14 budget is at R1.020 billion. This includes a roll-over amount of R772 million allowing an amount of R247 million for the commencement of new projects. The greater portion of the roll-over amounts is for the committed Soweto Upgrade & Renewal Marginalized Areas and Bulk Wastewater projects.

Table 6: 2013/14 Budget

CATEGORY	2013/2014 R 000	COMMITTED PROJECTS	NEW PROJECTS
Corporate Requirements	37 750	12 500	25 250
Unaccounted for Water	239 812	239 812	–
Operate and Maintain	23 200	–	23 200
Upgrading and Renewal	134 000	–	134 000
New Infrastructure	24 200	10 000	14 200
Planning and Engineering Studies	15 000	7 000	8 000
Information Technology	3 000	–	3 000
Marginalized Areas Program	125 512	85 512	40 000
Bulk Wastewater	417 809	417 809	–
Total	**1 020 283**	**772 633**	**247 650**

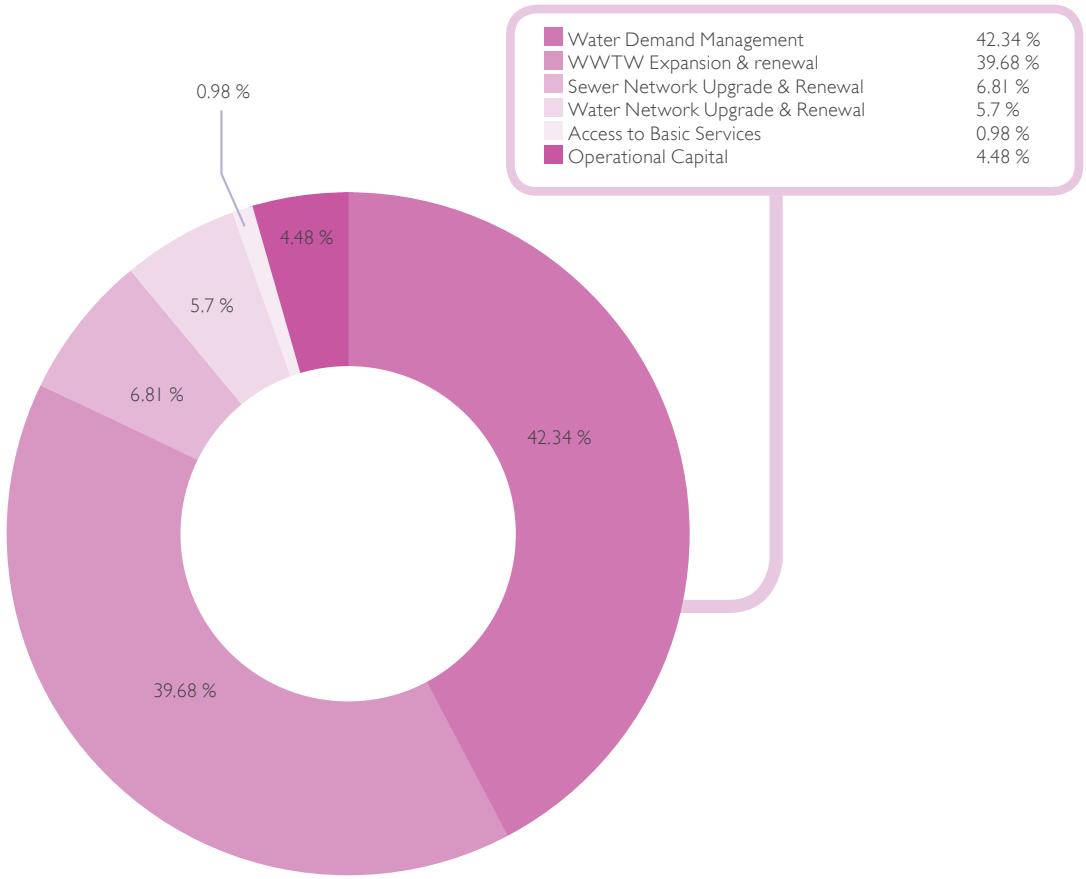
The allocated budget for the 3-year Capital Programmes amounts to R3.6 billion – with the yearly allocation as follows (Table 7):

Table 7: Three-Year Capital Budget

	Yr 1 – R'000	Yr 2- R'000	Yr 3- R'000
Water	424 162	369 000	482 000
Sewer	596 121	722 585	1 056 761
TOTALS	**1 020 238**	**1 092 585**	**1 538 761**

Key Programmes that will be implemented from the 2013/14 FY, can be categorised as follows:

Figure 3: Capex Allocation per Capital Programme

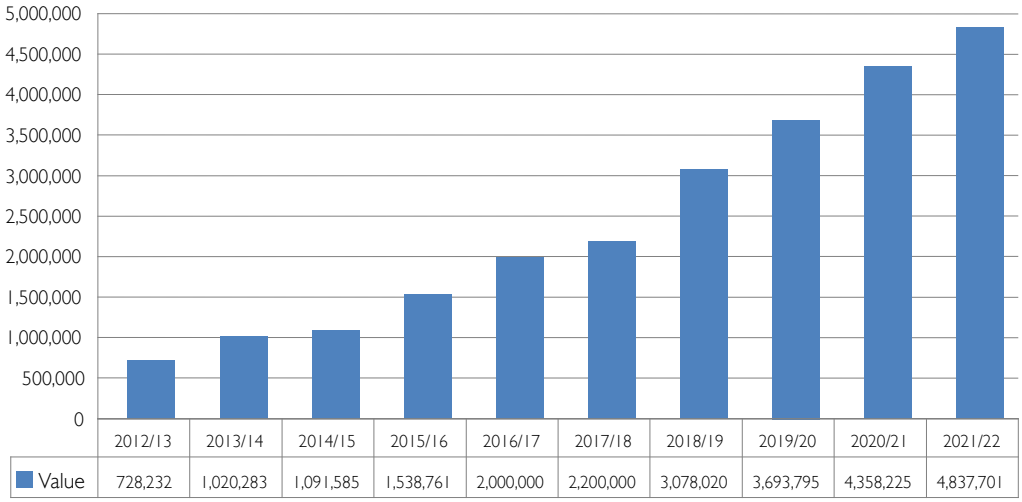


Key Programmes	Allocated 2013/14 Budget R'000
Water-Demand Management	432 024
WWTW Expansion and Renewal	404 809
Sewer-Network Upgrade and Renewal	69 500
Water Network Upgrade and Renewal	58 200
Access to Basic Services: Water	10 000
Operational Capital	45 750

5.1 JW WATER INFRASTRUCTURE STATUS

The 10-year Capital Plan (below) aligns with the GDS 2040 and Decade 1 priorities from 2012/13 to 2019/20. Decades 2 and 3 build on the outputs from Decade 1 in realising the long-term vision of the strategy. The budget requirements for JW Capital investments' projects are depicted in figure 4 (below):

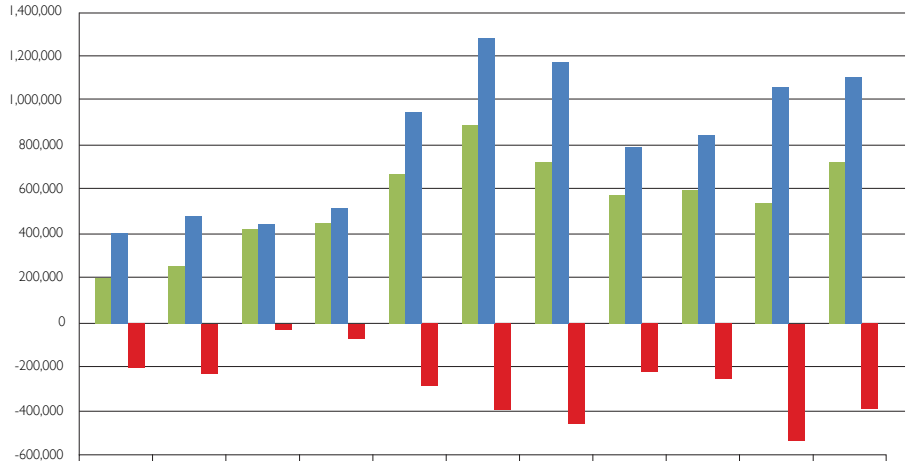
Figure 4: Ten-Year Capital Plan



	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Value	728,232	1,020,283	1,091,585	1,538,761	2,000,000	2,200,000	3,078,020	3,693,795	4,358,225	4,837,701

Due to budgetary constraints, current capital-investment plans indicate an infrastructure backlog of R6.7 billion – which has been steadily accumulating over recent years. Figure 5 (below) illustrates the progressive shortfall in capital funding over the last 10 years which has contributed to the infrastructure maintenance and renewal of existing infrastructure backlog.

Figure 5: Previous 10-Year Capital Funding Allocation



	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/10	2009/10	2010/11	2011/12	2012/13
Approved Budget	207,316	260,362	425,693	452,039	673,323	895,318	729,063	577,300	600,013	541,264	728,000
Required Budget	407,167	484,991	449,747	518,852	953,528	1,284,455	1,179,000	795,500	850,000	1,067,307	1,111,234
Shortfall	-199,851	-224,629	-24,054	-66,813	-280,205	-389,137	-449,937	-218,200	-249,987	-526,043	-383,234

5.1.1 Asset Management

The Asset Management Programme is currently in Phase 4, which involves company-wide integrated systems' roll-out. Phase 4 will be completed in 2013/14, which will mark the completion of the development of programme. The target for 2012/13 is to roll-out to head-office staff – followed by the remaining stakeholders in 2013/14. It is therefore intended that there be fully-operational systems by the end of the IDP term in 2016/17.

By 2014/15, the main aim is to complete the integrated systems' designs and operationalising the systems and systems support. An estimated R37 million is required for the completion of this phase – with key outcomes such as data-accuracy improvements which will raise accuracy from 87% to 94% and the asset-management practice of asset knowledge will have reached the best-possible levels of practice.

Table 7 (below) summarises the extent and values of all infrastructure assets. The CRC is R42.7 billion and the DRC amounts to R19.9 billion– implying that 53% of the asset base has been consumed. Of particular concern are those categories in excess of 60% such as outfall sewers, water reservoirs, pump stations and smaller high-volume assets such as manholes and connections. Specific programmes are in place for the renewal and upgrading of these assets and to assess and manage the risk associated with them.

Table 8: Asset Extent and Value

Sub-Category	Asset Group	Extent	Extent Unit	Replacement Value CRC)	Current Value (DRC) R million	% Value Consumed
Water Network	Bulk Mains	2 223	km	7 295	3 831	47%
	Distribution	9 196	km	5 322	2 812	47%
	Pump Stations	31	No	107	42	61%
	Reservoirs	117	No	1 710	650	62%
	Valves & Hydrants	92 164	No	1 105	289	74%
	PRV Stations	487	No	32	14	56%
	Metered connections	446 700	No	1 009	420	58%
	Servitudes	5 279	No	216	216	0%
Waste Water Network	Outfall Sewers	1 044	km	8 707	3 061	65%
	Pump Stations	35	No	84	43	49%
	Reticulation	9 794	km	9 111	5 439	40%
	Manholes	220 138	No	2 921	704	76%
	Sewer connections	437 383	No	775	298	62%
	Servitudes	85 589	No	357	357	0%
Waste Water Treatment Works	Treatment Works	6	No	3 643	1 574	57%
Buildings	Depots	15	No	280	106	62%
	Total			**42 674**	**19 856**	**53%**

5.2 Key Programmes and Projects

5.2.1 Water-Demand Management Programme

WC-WDM is one of JW's key flagship programmes, which aims to reduce the levels of water losses. JW is migrating from the water-losses methodology of UFW to using the-internationally recognised methodology which is NRW – as defined by the IWA. The rationale of the methodology is explained below:

Unaccounted For Water (UFW) is the difference between the volume of water delivered into a network and the volume of water that can be accounted for by legitimate consumption, whereas Non-Revenue Water (NRW) is the difference between the volumes of water delivered into a network and billed consumption.

JW over the years has been expressing water losses using the above UFW methodology and included the authorised unbilled consumption such as consumption in the informal settlements and the portion of consumption in deemed areas. The migration towards the NRW methodology will exclude the unbilled consumption in deemed areas and informal settlements, as per method below:

NRW = UFW+unbilled authorised consumption, i.e (water which is accounted for, but no revenue is derived.)

In the 2013/14 FY, JW will invest R432 million towards programmes that aim to reduce water losses. A mixture of technical, social and financial interventions will be implemented – aiming to reduce current UFW of 29.5% to 22% by 2016/17. The expected water savings will amount to a financial value of R368 million achieved by 2014/15. The reported annual net water losses at the end of 2011/12 FY were R301 million. Key Projects that will contribute to these savings are:

5.2.2 Pressure-Management Project

Pressure management is an effective way to control the amount of water lost in a system. This can be implemented without compromising the levels of service at the target or critical points. The aim of the programme is to reduce excess night-time water pressures in order to decrease background (small) leaks and to limit unnecessary pipe bursts. Elimination of pipe bursts improves quality of life in households in that there is a continuous supply. A small reduction in pressure can mean a significant reduction in real losses through leaks. Projected potential water savings from this project are 35 843 Ml per annum which is equivalent to R180 million/year).

5.2.3 Water-Pipe Replacement Project

The water pipe-replacement programme within JW is one of the key strategies aimed at combating water losses and improving the levels of service through the reduction of pipe bursts. To date, 3 phases of the programme have been implemented – which resulted in a generic prioritisation of suburbs targeted for the pipe-replacement programme from June 2008 to August 2012. A total of 21 suburbs have had about 200 km of pipelines replaced at a cost of over R200 million – over and above the dedicated Soweto and Alexandra Infrastructure Renewal Projects.

A total of 21 suburbs with 46 km of water pipelines with a remaining useful life of less than two (2) years were identified as priority for replacement in the current FY at an estimated cost of R45 million. However the total requirements for the coming five (5) years are estimated at R1 billion for approximately 900 km of water pipeline – mainly asbestos cement pipes that need to be replaced due to relatively high-burst frequency and a remaining useful life of up to 2 years.

The medium to long-term requirements are summarised in Table 8 (below) and it is expected that burst frequency will increase, with a decrease in remaining useful life. Network renewals have been escalated significantly in order to eliminate the pipe-replacement backlog by the end of Decade 1.

Table 9: Remaining Useful Life of Assets

Asset Category		Remaining Useful Life Ranges				
		0 – 5 Years	6 – 10 Years	11 – 20 years	> 20 Years	Total CRC
Water pipelines (incl. bulks)	CRC (R'000)	2,392,185	998,579	1,658,687	8,951,390	14,000,839
	Contribution	17%	7%	12%	64%	

5.2.4 Soweto Infrastructure Upgrade and Rehabilitation Project

This project is one of the main interventions of the WC-WDM strategy aimed at reducing the level of NRW to an acceptable level. This will be achieved through:

- Upgrading the water-network infrastructure. This involves replacing steel pipes with Unplasticised Polyvinyl Chloride (UPVC) pipes, relocating water network from the midblock to road reserve, replacing corroded galvanised yard connections with High Density Polyethylene (HDPE) pipes, the creation of water zones and installation of zone meters to enable a full water balance.
- Once-off repair of all leaks on properties (retro-fitting). It was established that most of the water lost is due to leaks at the properties. Although this was the responsibility of the owner, the intervention was considered to be a trade-off for customer buy-in process.
- Change customers from deemed consumption (20 Kl billed) to metered consumption through the installation of prepaid meters. The pre-payment system is the preferred option – considering that the City's focus is on smart meters and because it addresses the low payment level issue as every customer pays for water before use.
- Engagement with citizens for the creation of general awareness on water conservation through different media – including radio, newspapers, billboards, public meetings and door-to-door campaigns.

5.2.5 Smart Metering Project

SWM is a meter built with intelligence – that allows for bi-directional communication (besides other functions) between the meter and the meter-management systems – and with an option to remotely open and close the valve. The communication aspect is instrumental in improving the pre-paid vending system to multiple vending options available (e.g. cell phone and internet purchases). This functionality also addresses the challenge of estimation as meter readings can be done remotely.

The pilot will be conducted in different income levels areas, considering the associated social and political environments. This will allow JW to craft relevant solutions for each segment. Once the pilot has been completed and has been a success, the smart water meters will be rolled out city-wide. It is envisaged that 300 000 SMWs will be rolled out by 2030. The benefits of smart meters to consumers will be property leakage detection and repair and improve metering and billing accuracy.

5.2.6 Infrastructure Upgrade and Renewal Programme

In preparing JW capital investment plan cognisance is taken of the city's GDS 2040 and the Consolidated Spatial Development Framework. This includes alignment with development nodes along transportation corridors, prioritised densification and marginalised areas.

To the north of the city, upgrading of the Northern and Driefontein wastewater treatment works will support all of the proposed development initiatives occurring in the north of the city. The proposed new Lanseria treatment works will provide development potential into the defined expansion and consolidation areas of the city. In the south, the capacity expansion of Olifantsvei and Bushkoppie treatment works directly impacts on the extended BRT and development corridors into the Soweto region.

The water and sewer pipe replacement programs are planned in terms of water districts and in most instances are broader than the defined development corridors. There is however correlation in proximity to defined corridors which will provide continuity of service and supply capacity to promote development potential.

A significant portion of the investment plan is directed towards the upgrading and renewal in the marginalized areas of Orange Farm, Soweto and Diepsloot. This includes the provision of new water reservoirs, metering services and the upgrading of bulk water and sewer infrastructure.

5.2.7 WWTWs Expansion &Renewal

The CRC of the wastewater treatment works is R 3.6 billion, whilst the DRC amounts to R1.6 billion, implying that 57% of the works' value has been consumed.

The major project from 2012/13 to 2019/20 will be the construction of the new 50 Ml/day Lanseria WWTW, located in the north-western side of the city. The other major project will be the construction of Module 2 of Unit 5 at the Northern WWTW. Each of these new facilities will have a treatment capacity of 50Ml/d. Also in the Northern Basin will be the completion of the current construction of Module 1 of Unit 2 at Driefontein – resulting in an additional capacity of 25Ml/d. In the Southern Basin the completion of the current construction of Module 3 of Unit 3 at Olifantsvlei WWTW, will give an additional 50Ml/d treatment capacity and a further 30 Ml/d capacity through the refurbishment of 2 existing modules at Unit 2. Furthermore, the replacement of Bushkoppies aeration system will increase the WWTW by 48 Ml/day. Table 10 (below) demonstrates Priority Programmes that will be implemented in the medium to long-term.

Table 10: IDP Flagship Programmes 2013/14–2015/16

Project Description	Category	City Priority	Value R'000
Olifantsvlei Module 3 Unit 3, 50Ml/d	Upgrade	SHSUP	18 300
Bushkoppies aeration, 48Ml/d	Renewal	SHSUP	66 000
Driefontein Extension, 25Ml/d	Upgrade	SHSUP	176 000
Lanseria WWTW, 50Ml/d	Upgrade	SHSUP	140 000
Biogas to energy	New	Green Economy	82 000
Infrastructure Renewal Plan	Renewal	SHSUP	267 000
Total			**749 000**

5.2.8 Sewer-Network Upgrade and Pipe Replacement

The CRC of the sewer network is R22 billion and the depreciated value DRC amounts to R9.9 billion, implying that 55% of the network value has been consumed.

The priorities for the period 2013/14 to 2019/20 are mainly upgrading infrastructure in response to increased sewage flows and replacement of infrastructure with a remaining useful life of less than 2 years. Much emphasis is placed on the previously-marginalised areas of greater Orange Farm, Ivory Park, Diepsloot and Lion Park. Specific focus in these areas would be to optimise the infrastructure where it exists by making sure that historical operational flaws are corrected and that there is an improved level of service.

During the FY 2013/14 to 2014/15, focus will be on the elimination of infrastructure bottlenecks – particularly in marginalised areas and in response to infrastructure-hotspot areas that often have been a source of major protests by affected residents.

These hotspot areas have also consumed a lot of operational and maintenance resources, due to above-average pipe bursts and sewer blockages. Many of these areas are in Soweto, Orange Farm and Ivory Park. There will also be specific focus on outfall mains that have become major sources of pollution to receiving-water bodies, particularly in Soweto. Table 10 (below) demonstrate key priority sewer-network projects that are planned for 2013/14 to 2015/16:

Table 11: IDP/Flagship programmes 2013/14–2015/16

Project Description	Category	City Priority	ValueR'000
Network renewal	Renewal	SHSUP	61 000
Network upgrades	Upgrades	SHSUP	35 500
Marginalised areas	Upgrades & renewal	SHSUP	81 500
Electro-mechanical upgrades	Upgrades & renewal	SHSUP	5 100
Total			**183 100**

5.2.9 Water Network Upgrade and Pipe Replacement

With the continuous growth of CoJ, there is a related increase in water demand and therefore a need to continuously upgrade and replace infrastructure so that it can continue to provide access to water in compliance with agreed service-delivery pressure, flow standards and minimum 24-hour security of supply. The CRC of the water network is R16.8 billion. The DRC amounts to R8.3 billion, implying that 51% of the network value has been consumed.

The main thrust of projects for the IDP period is to provide water supplies to newly-developed or soon to be developed areas, reduce above-normal pressures through the installation of pressure-reducing valves, create water zones for ease of management of the complex systems, upgrade and replace assets with remaining useful life of less than 2 years, upgrade overwhelmed pump stations and upgrade bulk infrastructure and reticulation infrastructure in the marginalised areas of Orange Farm, Lawley, Ennerdale, Diepsloot and Ivory Park. Specific focus for 2013/14 to 2015/16 (Table 11, below) is to complete eradication of infrastructure backlogs, identify and eliminate infrastructure bottlenecks, ensure minimum 24-hour security of supply across all supply zones through the construction of reservoirs, reduce water losses and improve service-level standards through pipe-replacement programmes. These programmes anticipate developments that aid socio-economic development.

Table 12: IDP priorities 2012/13–2015/16

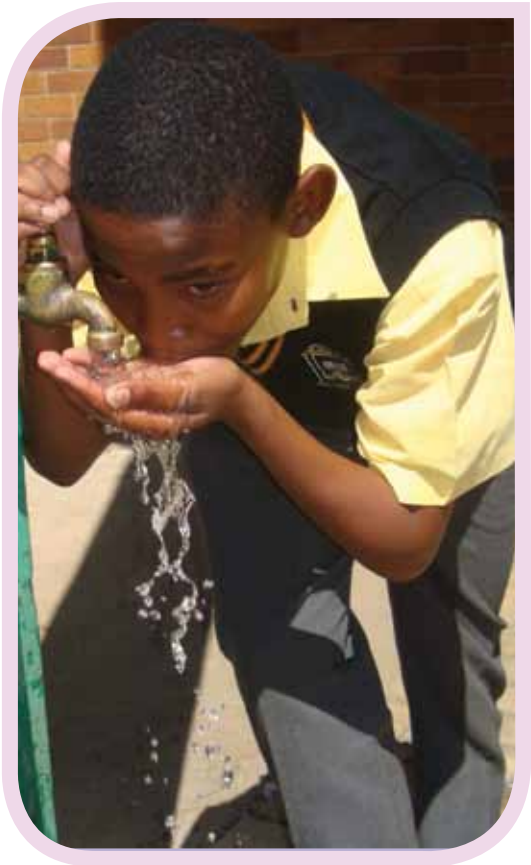
Project Description	Category	City Priority	Value R'000
Network renewal	Renewal	SHSUP	160 000
Network upgrades	Upgrades	SHSUP	221 000
Marginalised areas	Upgrades & renewal	SHSUP	117 100
Reservoirs	Upgrades	SHSUP	47 200
Electro-mechanical upgrades	Upgrades & renewal	SHSUP	17 100
Total			**562 400**

5.2.10 Provision of Basic Services

The water and sanitation coverage for at least LoS 1 – which is referred to as Basic Level of Service – is at 97.77% and 91.30% respectively as of November 2012. This implies that the water and sanitation LoS1 backlog is 26,091 and 101,675 households, respectively. The coverage calculation is based on a total number of households of 1,169,048, of which 196,391 are in informal settlements. The backlog is being serviced through nominal services, which are chemical toilets and water tankers.

In 2013/14 it is planned that 3,362 households will be provided with access to basic water and 2,860 households with access to basic sanitation. This will reduce the water backlog to 19,619 and sanitation to 96,641 – resulting in coverage increase to 98.32% and 91.73% respectively. A budget of R40 million has been allocated in the 2013/14 financial year to support the basic services' programme.

By the end of Decade 1, there will be 100% coverage on LoS 1 for basic water. Subject to housing providing land tenure, JW will upgrade water and sanitation services to those communities to the desired LoS 3 – by Decade 1. This will be mainly done through provision of bulk services. In addition, JW will maximise USDG funding – to ensure that the desired level of services are achieved, such that informal settlements in incumbent land are formalised.



5.2.11 Water Resource Management

The issue of reducing the carbon footprint is a global concern. It contributes toward creating a green economy, but of concern to JW is the impact of carbon emission in terms of causing droughts and other extreme weather events. This is a threat to the availability of water as summers are expected to get drier and winters are projected to get wetter – resulting in floods.

JW is adopting appropriate measures so that the impacts of climate change are planned for. The roll-out of the BTE technology into WWTW, is a key contribution towards creating a green economy and a response to climate-change impacts. JW targets achieving 10 890 tons of CO2 emissions offset by the end of 2013/14, as a result of the BTE in Northern WWTWs. Energy has now become a key driver in the waste-water treatment value chain of JW and every effort is being made to produce 'green energy' and to reduce power consumption. Increased electricity costs of R40 million per annum have been experienced at the works over the past 3 years.

Sewer spillages have a serious impact on the pollution of rivers and conservation of the environment. JW has improved monitoring technology to better monitor the sewer flow and cut down on the volume of overflows. The number of spills has been high but JW has managed to reduce spillages to less than 300 in 2011/12.

The quality of final effluent will continue to be improved and the high levels of compliance will be maintained.

The supply-chain management policies will be revised to give greater emphasis to green procurement – such that JW promotes services that are low in carbon emission. Carbon emission has a great impact on protecting future supplies. JW will continue to implement Integrated Water Resource Management interventions to safeguard water supplies from impacts of carbon emission – focusing on leakage control, metering and water efficiency.

5.2.12 Stakeholder Management

JW has a diverse group of customers socially, geographically, economically and culturally. They therefore have a variety of expectations, needs and ways of living. The company also has a range of commercial customers – ranging from industries, hospitals and other private and public services.

Some of the biggest challenges of JW are factoring the preferences of the different segments of customers in the delivery of water services as well as ensuring there is a balanced approach in investment decisions between the lower income groups, the vulnerable, and big business.

The customer-satisfaction survey conducted in 2011/12, reflected that JW is at 62% on customer satisfaction – which is 3 % below the industry benchmark of 65%. For 2013/14, JW will invest R26 million in stakeholder engagements' initiatives.

Focus will be the following:

- Influencing customer behaviour through educational and awareness programmes and correct usage of sewer infrastructure.
- Community-engagement sessions and information sharing about JW services.
- Creating an open and interactive customer-engagement platform to align service offerings with customer expectations.
- Ensuring notification of customers on planned maintenance that could result in disturbed water supply.
- WC-WDM community initiatives and interventions.

5.3 Towards alleviating Poverty, Creating Employment & Improving Quality of lives.

Co-Production Purpose

This project brief was triggered by the Executive Mayor's challenge to professionals in the municipal services sector in treating people and communities who they are supposed to serve as assets. This has prompted the identification and defining a range of locally driven service delivery initiatives that would improve the lives of particularly poor and previously un-served communities in terms of poverty alleviation, creation of employment opportunities and reconfiguration of the legacy of spatial inequality.

In his landmark book Development as Freedom, Professor Amartya Sen identifies five interrelated "instrumental freedoms" providing persons with types of rights and opportunities to improve their lives and shape their future. These freedoms are viewed as the principal means of development. He presents a powerful argument which attests to the multi dimensional characteristics of social exclusion. His articulation of the rationale underlying the links between different categories of rights and opportunities is clear and convincing.

Access to one facilitates access to others, whereas denial of any one category impedes one's ability to reach others. This conceptual framework is well suited to the analysis of public policies affecting poor and marginalized populations. Public policies that promote these rights enhance the capabilities of citizens and empower them to become agents of their own development. Such policies enrich the lives of citizens and enable them to achieve development goals.

Such that these project briefs are an attempt to respond to this challenge and are required to enable these initiatives to progress from a good idea or Feasibility Study to a formal request to the leadership of both Johannesburg Water and the City of Johannesburg. The contents of the Project Briefs will eventually be expanded into Project Initiation Documents (PIDs), which will contain detailed project plans.

These Project Briefs are short and provide an overview of the proposed co-production projects and programmes.

5.3.1 Urban Rainwater Harvesting Master Plan

Background

One of the outcomes of the GDS 2040 vision of the City of Johannesburg identified water security of supply in addition to water conservation and water demand management as a risk area against the backdrop of rapid urbanisation where the recent 2011 Census revealed that both the population and households growth rate is 3.7% per annum. This will necessitate a re-think in the urban water management strategy of the City of Johannesburg. One of the interventions identified was urban rainwater harvesting.

Project Definition

Rainwater harvesting is practised in over 65 countries and is the future of sustainable water management strategies.

Project Objectives

On analysis, it is noted that the growth in water demand within the City of Johannesburg is largely due to in-migration which is changing requirements in the domestic, industrial and agricultural areas. The current population growth of 3.7 % per annum is influencing demand. With this prospect of an escalating water demand, the search for augmenting supplies has become one of the major worries of the municipality and its Johannesburg Water entity. The finite volumes of water from the upper Vaal River catchment have to be managed optimally and alternative sources of supply found.

The high-intensity urban population is located in large paved and roof areas which are ideal for rainwater harvesting and can be fruitfully utilised for developing individual schemes and the collected water supplied for potable and non-potable uses. These smaller schemes should, preferably, be integrated with existing conventional water supply systems. The harnessing of water within the City of Johannesburg and the surrounding urban areas provide appropriate rainwater catchment systems to alleviate to a large extent, the future water demands. The two major sources that can best be utilised are:

- urban runoff in larger catchments and
- the development of rainwater catchment systems

In the case of both these sources, large quantities of runoff are currently going to waste instead of being used to augment the finite water supply from the Lesotho Water Highland Scheme, whereby the Polihali Dam which is expected to be commissioned in 2019/20 will not meet the projected water demand.

Project Scope

A water audit would have to be prepared for each category of use. This would include such parameters as water demand and quantity of supply. Supply from rainfall can then be determined using various areas of buildings including rooftops, paved areas, non-paved areas and determination of incident rainfall from average rainfall data for about 25 to 30 years.

An urban rainwater harvesting master plan for the City of Johannesburg would then require a scientific study where universities within the City of Johannesburg would be appointed to conduct the investigation. It is expected that the implementation of the master plan would then comprise the creation of sustainable job and involve the communities. Such a study involves:

- Determining catchment areas and stratification to rooftops, paved areas and unpaved areas;
- Segregation to harvestable and non-harvestable areas;
- Collection of historical monthly rainfall data for the past 25 to 30 years;
- Conducting a probability analysis;
- Calculating rainfall endowment and harvestable rainfall for the three stratifications;
- Determination of surface runoff based on contours to identify points of storage;
- Design of storage based on maximum or optimum intensity of rainfall;
- Provision of filters, grease and silt traps and appropriate storage locations
- Devising a catchment management strategy to prevent or avoid point and diffused sources of pollution;
- Identifying water consumption demands for various categories and deciding on type of use for either domestic, industrial or agricultural uses;
- Working out cost benefit analysis based on present and future costs of water;
- Determining sustainability and dependence on harvested water and
- Review of current municipal bylaws and building code to incorporate rainwater harvesting and stipulate retrofitting of existing buildings.

Typical Case Study of Rainwater Harvesting in Bangalore

Industrial unit of Escorts-Mahle-Goetze located in Yelahanka a northern satellite town of Bangalore with a site area of 20 hectares. Rainfall incident on the site was calculated to be 185 million litres per year (Ml/year) of which, it was estimated that 62 Ml/year could be harvested. A rooftop harvesting system for 1280 m2 of roof area has been put in place, which collects 1.05 Ml/year. The rooftop has now been extended to harvest the entire 62 Ml/year harvestable. A payback period of about 4 years is expected of an investment of Rs 2.5 lakhs incurred toward the project including a storage sump, pump and piping.

5.3.2. Re-blocking and Reconfiguration of Informal Settlements

Background

One of the challenges facing the City of Johannesburg in addition to poverty and unemployment is spatial inequality. Re-blocking is a process developed by Shack Dwellers International (SDI) that is based primarily on the spatial reconfiguration of shacks in informal settlements. Shacks are rearranged and reconstructed to maximise open spaces in the settlement. Shacks are also built on raised platforms and the settlement graded to prevent flooding. Re-blocking is considered an in-situ process due to its minimal disruption of residents' lives throughout the duration of the project. Re-blocking is only made possible by the commitment and manual labour of community, a bottom up strategy.

A case study in Cape Town was made possible by a multi-stakeholder partnership comprised of Non-Governmental organizations (NGOs), Community-Based Organizations (CBOs), the Informal Settlement Network (ISN), the Community organization Resource Centre (CORC), a support NGO who provides financial and technical support to both the partners and community.

Project Definition

In a partnership with the Informal Settlements community, NGOs, CBOs, the City's Housing Department, City Power, Johannesburg Roads Agency, Development Planning Department and Johannesburg Water, should initiate a re-blocking programme in response to the objectives of co-production which would also improve poverty, address unemployment and alleviate spatial inequality.

Community members would be hired to implement the physical re-blocking in conjunction with CBOs and NGOs and outside contractors. This would result in a settlement organised into neat rows and clusters with improved shacks, road servitudes and installation of hard services such as water taps, flushing toilets, electricity connection, to every community member, improving health conditions and fire safety.

Shack materials and installation of services such as water taps and toilets are provided after re-blocking is finished. Where the previous arrangement of the original shacks made installing taps and flushing toilets nearly impossible the order that re-blocking introduces to the settlement eases some of the difficulties in service provision and result in a serviced township development without communal taps, VIPs and chemical toilets and ushers improved pride, safety and health of the community and settlement.

The partnership makes involving the community possible, as for example, ISN and CORC would work directly with the community workers during all stages of re-blocking. As a result, the community feels a sense of pride and ownership for what they have created, unifying the community, giving job opportunities to those who otherwise may not have one and creating a sustainable change. As one community leader stated, "we are not just building homes, we're building people".

Project Scope

The City's entities and relevant departments would jointly identify unencumbered informal settlements for re-blocking and engage communities, local NGOs and CBOs ensuring full participation with cluster designs to ensure minimal disruption to people's lives in a way that no one would be relocated. While the full delivery of services, such as a paved access road, would be a long term plan, the space created would enable installation of level-3 services such as toilets and water taps, electricity connections and access to remove refuse, parks and even local clinics, thereby promoting community ownership.

Re-blocking, re-organises space for roads and bulk services; re-builds rodent resistance and fire protection; re-grades flooding and grey-water and healthier spaces and re-thinks progressive spirit and community morale.

5.3.3. Contractor Development through Pipe Replacement Programme

Background

The pipe replacement programme within JW is one of the key strategies aimed at combating water losses and improving the level of service through reduction of pipe burst. Census 2011 results has showed that City households and population has been growing at 3.7% per annum, which means that JW has more people with high expectation of high quality water services. It is therefore critical that pipe replacement programme be done in partnership with citizen so that they can have ownership of City assets.

City intend to invest a total of R 110 billion in infrastructure development over the next 10 years, with approximately 25 billion going to be invested in water services infrastructures.

Project Definition

Based on the international standard or best practice of good Asset Management, JW have to renew or replace its assets at a rate of 2.1% of its total values per annum. As part of pipe replacement programme, JW in partnership with communities will appoint and develop Small Medium Macro Enterprises (SMMEs) and offered them technical and business skills so that they will become sustainable business in future.

Project Scope

The SMMEs will be part of the programme for a period of four years of which by the end of the programme they will have achieved CIDB Grading 4 CE/PE. Through partnership with various stakeholders qualifying applicants within the City will be identified focusing on the historically disadvantaged individuals. JW will appoint Training Service Providers and Mentors who will guide all qualified SMMEs through technical training and on-job training. SMMEs will be provided with pipe replacement work packages over a period of four years, starting with less contract value in the initial contract up to the high value that meets CIDB requirements of Grade 4 CE/PE.

In line with the best practices and 2040 vision, JW intend to replace a total of 900 km of water networks mainly the Asbestos Cement Pipe and a total of 800 km of sewer networks in the coming five years. JW aim to invest approximately R2 billion in the next five years in both water and sewer pipe replacement programmes. Part of the total 1700 km of both water and sewer network to be replaced will be ring-fenced work to be done by newly established SMMEs. This programme will be critical for creation of sustainable jobs, poverty alleviation and improving economy of the City.

JW intend to increase a pool of technical skills within the City through partnership with Universities, whereby student will also be offered an opportunity to perform experiential training under consultants that will be appointed to manage the programme. Students will be offered 12-24 months contract.

5.3.4. Creation of Permanent Jobs (Meter Readers, Facility Maintenance and Meter Replacement) in JW

Background

One of the imperatives is to ensure that Johannesburg Water also plays its role in the creation of "decent" jobs. The challenge is to do this within the existing mandate of the Company and with due cognisance of the budgetary challenges facing the Company.

Project Definition

An analysis of the situation has identified three areas where the Company can create jobs at various levels in the next 18 months.

These areas are as follows:

- Pre-paid metering: Temporary positions at Avalon depot must in the near future convert to permanent. (Within 18 months). This is a need created by the introduction of pre-paid metering and relates to the vending of water credits to the community. There is a possibility for 60 permanent employees at administrative levels
- Wastewater Treatment Works (WWTW): Temporary positions at WWTW to be converted to permanent within the next financial year. (6 to 8 months). This has the potential for a maximum of 30 positions at entry level.
- Meter Faults and replacement: The current process to address these areas (T Codes) and planned replacement of meters is to use water teams and contractors. The creation of dedicated teams and supervisors should address all the needs including meter replacements and free up resources to concentrate on the business of reactive and planned maintenance. This will result in the work being done in house instead of by contractors and prevent backlogs.

Project Scope

Following hereunder is an outline of the project scope.

Projects Description	Desired outcome	Activities
Pre-paid metering:	The creation of permanent positions to staff the structure to be created for the vending and management of water credits	The needs to be analysed at hand of the current roll out and final structure to be determined
WWTW	The regularisation of the housekeeping activities at the WWTW with a view to creating permanent structures for core activities related to the maintenance of the facility	Assess the need for permanent staff to take over the current labour broker activities in the housekeeping and basic maintenance activities at the Works
Meter Replacement	The establishment of dedicated teams for the purpose of addressing meter queries and the meter replacement programme	Develop a business case for doing meter replacements in house and focusing the activities in one area instead of having depot teams addressing the queries and falling behind. It has a direct impact on the meter reading function.

5.3.5. Supply Compost to Farming Co-operatives "Food Security Programme"

Background

Sewage sludge is a by-product formed from the cleaning of wastewater. The handling and the disposal of the sewage sludge produced during wastewater treatment must be in line with the Sludge Guidelines published in 2006. The guideline characterizes the quality of sludge in terms of three criteria:

- Microbiological class A, B or C.
- Stability class 1, 2 or 3 and
- Pollution class A, B or C.

Each of the criteria is divided into three ratings, depending on the quality of the final sludge product. The guidelines also place fewer disposal restrictions on a final product that attains a high quality rating in each of the three criteria.

Project Definition

Johannesburg Water has introduced a Sludge Plan to align their treatment processes with the guideline and to produce "A1a" sludge (Compost). Upon production of the A1a sludge which is a well composted sludge with fewer restrictions on final application, the compost product could be used in any application as a fertilizer.

Although the sludge plan is still being implemented and not yet finalized, on Driefontein Works the digestion process has proven to be very effective. The wet Driefontein Works sludge is transported to Northern Works sludge drying beds to produce a fully compliant sludge. This product will then be available for use by the public.

Project Scope

In 2011/2012 financial year 3 928 tons of dry sludge was produced at Driefontein Works and in the last 9 months 4 065 tons of dry sludge was produced. With this production of A1a sludge between Driefontein and Northern Wastewater Treatment Works, a good quality compost product will be supplied to agricultural projects of local communities. Initially the product will only be available from the two Wastewater Treatment Works in the North. Depending on capital roll out of the Sludge Plan, the product will be available from the WWTWs that are in the South of Johannesburg in two to three years' time as well.

Based on the dry sludge production of Driefontein Works a total of 300 to 350m^3 of compost will be available on a monthly basis for community projects from September 2013. This compost can then be used as fertilizer in the gardening/farming activities of the identified co-operatives.

Compost will be provided to the registered farming co-operatives operating within the City of Johannesburg and specifically for gardening/farming activities by local communities and not for resale.

5.3.6. Internal Plumbing and Water Leaks Repairs Programme

Background

These programme will target poor communities within the City with municipal property values which are less than R350 000. The project will form part of the Water Conservation and Water Demand Management Programme of Johannesburg Water aimed at saving water and making the communities water-wise by empowering members of the community through Enterprise Development mainly focused on identifying and repairing water leaks within households to reduce wasteful consumption. However, there might be other areas whereby all properties are targeted irrespective of the municipal property values due to high water losses.

Project Definition

Through this community partnership between households and Johannesburg Water, the programme aims to achieve the following:

- Save and Conserve water,
- Reduce consumer water bill and make it affordable,
- Reduce bulk water purchases from Rand Water,
- Avoid the threat of water demand outstripping supply by 2017/18 and
- Increase consumer financial savings.

Project Scope

During the course of the envisaged Internal Plumbing Water Leaks Repair Project (IPWLRP), all household water leaks would be repaired free of charge. This will be a once off opportunity after which, each and every household will again be responsible for his/her internal repairs costs. Project Development Facilitators (PDFs) will be appointed, trained and assigned with the responsibilities of visiting all households so to assist to identify water leaks within and on properties, teach households on how to read water meters, how to maintain plumbing in good order and how to reduce water consumption to reasonable and affordable amount.

Given the fact that a huge number of youth is unemployed, this programme will mainly target youth, women and people with disabilities to form SMME's while Further Education and Training (FET) students who have plumbing training will be targeted as Trouble-Shooters or Team Leaders. SMME's will also be offered business skills so that after the completion of the project they will be able to market their skills within the community.

JW intend to start with the implementation of this project in 2013/14 financial year by intensifying community/ SMME's involvement in the current Soweto Infrastructure Upgrade and Renewal Project which is being implemented in line with this model. JW plans to invest R470 million in Soweto over the next two years.

At the same time, detailed assessment and planning for the roll out of this project Citywide will be conducted in 2013/14 financial year. It is envisaged at this stage that implementation of this project in other areas of the City will commence in 2014/15 financial year.

5.3.7. Water and Sewer Network Repair and Maintenance Programme

Background

Johannesburg Water has experienced a large number of pipe failures, blockages and bursts on both sewer and water mains in especially hot spot areas like Ivory Park, Alexandra, Diepsloot, Orange Farm and sections of Soweto. This then leads to delayed response times due to the high frequency of infrastructure failures which have a negative impact on customer satisfaction levels in these communities as well as increased water losses.

In order to rectify the situation in the hot spot areas Johannesburg Water will appoint local "As and When" contractors with the necessary expertise to attend to infrastructure failures on the water and sewer infrastructure on behalf of Johannesburg Water. This approach will ensure that problems are attended to with the added benefit of local business opportunities which leads to addressing unemployment in these targeted areas.

Project Definition

The project will be targeting Hot Spot areas which includes Ivory Park, Diepsloot, and Orange Farm with the aim to improve response times which will lead to better customer satisfaction levels and indirectly reducing water losses especially on the water network. It furthers targets local contractors from these identified areas. The contractors work will entail attending to burst pipes, overflowing sewers, replacing or repairing leaking meters, valves and hydrants. Similar model is currently used by Johannesburg Water in Alexandra whereby five (5) small contractors have been appointed to carry out repair and maintenance of both water and sewer infrastructure.

The project will add to the contractor's experience which will lead to improved CIDB (Construction Industry Development Board) grading for the small local contractors. This will ensure that the local contractors can grow and compete for better and bigger projects at a later stage; which also means that the contractor will employ more people from local communities to execute these bigger projects.

Project Scope

The contractors will be allocated the work as identified through the works order system run by Johannesburg Water. The contractors will supply material required to execute the works which will further stimulate local businesses and assist in addressing unemployment and poverty. It will also be expected that these small contractors employ targeted groups which include unemployed women and the youth.

It is anticipated that this approach will cost approximately R10 million per area which then makes the total estimated cost of the project R30 million for identified areas. There are currently no dedicated funds in the 2013/14 financial year for this project. Therefore funding should be sourced from possible savings that can be realised in the operating budget for the 2013/14 year. Thereafter dedicated funding will be made available for the financial years to come. The number of contractors will depend on their CIDB grading which determine the contract value. The contracts will also run over a period of 36 months.

5.3.8. Communications/Awareness Creation, Stakeholder Engagement and Empowerment Programme

1. Background

One of the major challenges that JW is faced with is that of creating "decent" and sustainable jobs that will contribute to poverty alleviation. The job creation initiative can be addressed through the process of developing the needs and benefits of collaboration and partnership with Community Based Organization (CBOs), Non-Governmental Organizations (NGOs), Grassroots Associations, Faith Based Organizations (FBOs), Youth Formations, etc. can be a challenging but interesting experience and realisable.

Successful community engagement and empowerment requires commitment to actively engage with stakeholders, listen to them, build a relationship with them and then respond to their concerns in a mutually beneficial way. Engagement is not an end in itself, but a means to help build better partnerships with societies in which JW operate, ultimately resulting in improved job creation and poverty alleviation.

For water users and communities to effectively contribute to water resources management, they need to be aware of the issues and difficulties and ultimately have a role to play in resolving whatever challenges that their respective communities are faced with.

2. Project Definition

JW, through the involvement of such community-based structures is intending to conduct a comprehensive stakeholder analysis, aimed at determining the capacity of users and communities to participate as a key part of any consultation programme. Considering the importance of community-based approach, JW has introduced different plans and programmes to institutionalize the local community through local people's participation.

Currently, there are various communities, grass-roots organizations operating under the community-based approach framework in different sectors that can be used (by JW) as "Water and Sanitation Warriors" especially in the following job creation key areas:

2.1 Community/Stakeholder mobilization and awareness creation: Unemployed youth will be identified and provided with the appropriate and accredited training that is aimed at capacitating them to be Community Development Facilitators (CDFs).

2.2 Extensive Public education and empowerment: Locally based NGOs, CBOs, FBOs, Grassroots Organizations, etc. will be identified and apportioned the responsibility of conducting "Door-to-Door" campaigns and community empowerment. Unemployed youths, especially those who have the Matriculation Certificate, will be exposed to further training (accredited) as public educators and social facilitators in the water and sanitation fields and be utilized to conduct such activities.

2.3 Distribution of pamphlets, Loud-Hailing and spreading of specific messages: Unemployed youth will be identified and equipped with specific skills as Foot-Soldiers and/or Ambassadors of e.g., Water Conservation, Planned and Unplanned water interruptions, Maintenance of infrastructure, 6kl Free-Basic-Water Drive, etc.

2.4 Community Radio Stations and Local newspapers: Community radio stations and local newspapers will be encouraged (through the partnership initiative) to employ locally based and qualified youths (in the electronic and media fields) as water and sanitation promoters.

3. Project Scope

Following hereunder is an outline of the project scope and timelines at high level. It is envisaged that JW can create jobs at various levels in the next 18 months.

It is estimated that an amount of R18 million will be spend to kick-start the whole process.

Project Description	Desired Outcome	Time line	Activities
Community/Stakeholder mobilization and awareness creation on Water and Sanitation related projects/ initiatives	The creation of permanent positions to unemployed youths as CDFs who will be the full-time "eyes and ears" of JW on the ground.	Sept. 2013	Identification and training of unemployed, locally based youths and later create an environment for them to establish cooperatives, etc.
Extensive Public education and empowerment project which is aimed at creating awareness and empowerment on issues related to water conservation and maintenance of infrastructure. (conducted by the *"Water Conservation Warriors"*)	The creation of permanent positions and financial viability of NGOs, CBOs, etc. and transfer of skills to the unemployed youths who will later be used to conduct such activities or partner with such organizations.	Aug. 2013	Identification and assess the need for these organizations to take over the current labour broker activities in the further training and basic upkeep of HR related activities
Distribution of pamphlets, Loud-Hailing and spreading of specific messages:	The establishment of permanent community based forums which will be utilised as JW "Foot-Soldiers"	Oct. 2013	Assess the need for establishment of permanent locally based cooperatives responsible for spreading JW's specific/targeted messages.
Community Radio Stations and Local newspapers	The creation of permanent positions targeted on unemployed but qualified youths (in the electronic and media fields)	Nov. 2013	Enter into partnership with the locally based community radio stations and newspapers with the aim of encouraging them to utilize the youths as JW's Ambassadors.

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Chapter 6: Key Service Delivery Programmes: Desired Outcomes

Key Service-Delivery Programmes are shown in Table 14 (below) which illustrates expected outcomes that will emanate from programme implementation. The outcomes are not likely to change during the short and medium-terms, as all the Programmes will be implemented towards a common outcome.

Table 13: Desired Outcomes

City Priority	Key Programmes	Key Projects	Budget 2013/14		Socio Economic Benefit	Desired Outcome by 2016
			Capex ('000)	Opex ('000)		
Financial Sustainability and Resilience	Water-Demand Management	Pressure reduction	-	23 200	Reduce service interruptions by reducing pipe bursts from 42 000 to 35 700 per annum	Reduced water demand of CoJ to an annul 450 000 Mlby 2015 (baseline at June 2012 was 536 000 Ml) Improved payment levels from current 15% in deemed consumption areas. to 90% Reduce UFW to 22%
		Soweto Infrastructure Upgrade and Renewal: Prepaid meters	232 812	-	Refurbished/renewed internal water reticulation. 1 000 job opportunities created and 100 SMMEs developed	
		Smart Water Meters	20 000	-	Improve on metering and billing accuracy, and on property-leakage detectionand repair	
		Pipe Replacement	156 012	-	Improve water revenue and customer-satisfaction levels due to reduction in frequency of pipe bursts	
Agriculture and Food Security	Urban Water Management	Compost offering to CoJ FarmingCo-operatives	Compost made available at no cost, for collection by Co-Ops		Encourage/support substantive farming – to reduce poverty	Supply all CoJ farming co-operatives
		Rain-water Harvesting and Crop-Irrigation Methods	-	1 300	Encourage rainwater-harvesting methods	Train co-ops on crop irrigation and rainwater-harvesting methods

Table 13: Desired Outcomes (continues)

City Priority	Key Programmes	Key Projects	Budget 2013/14		Socio Economic Benefit	Desired Outcome by 2016
			Capex ('000)	Opex ('000)		
Sustainable Human-Settlement Upgrade Programme	Infrastructure Upgradeand Renewal	WWTWs Expansion andRenewal	404 809	–	• Increase capacity to support more than 200 000 h/h equivalents in Soweto, Roodepoort, Lionsparks, Kya Sands, and Cosmo City, and formalisation of informal settlements • Unlock socio-economic development along Diepsloot/ Lanseria Corridor	Increased capacity at: Olifantsvlei, 50 Ml/d; Bushkoppies, 40Ml/d; Driefontein, 25 Ml/d; Lanseria, 50Ml/d. About 80 permanent jobs created on completion of Lanseria works
		Sewer Network Upgrade and Pipe Replacement	69 500	–	• Reduce sewer spillages and pollution levels. • Improve LoS 1 to LoS 3	Complete renewal of 800 km of sewer pipes
		Water Network Upgrade and Pipe Replacement	58 200	–	• Improve level of service from LoS 1 to LoS 3. • Support economic activities in Diepsloot/Lanseria Dev. Corridor	Complete Lanseria Reservoir, 25Ml; Diepsloot Reservoir, 20 Ml; Orange FarmReservoir, 35Ml
	Provision of Basic Services	Access to Sanitation	–	30 000	• Improve health and hygiene • Access to LoS 1 (VIP) for 3 362 h/h.	Increased coverage from 91.40 to 92.38% in less-formalised areas.
	Provision of Basic Services	Access to Water	10 000	–	Access toWater for 2 860 h/h, at LoS 1	Increased coverage from 98.03 to 99.06% in less-formal areas within 100 m radius
SMME and Entrepreneurship Support	Contractors' Development	SMME Incubation Project	Included in specific Capex Project Funding		Higher contract turnover and skills' development	10 contractors identified and developed to CIDB Grade 4 level
Active and Engaged Citizenry	Stakeholder Engagement	Consumer Awareness and Education	–	26 000	Reduced recurring sewer blockages in intervened areas, and promote health conditions	Awareness programmes completed: Ivory Park, Diepsloot, Orange Farm, Diepkloof, Alexandra,Noordgesig, Vlakfonteinand other areas.

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Chapter 7: Management & Governance Structures. & Business Functions

Figures 6 and 7 (below) depict the Organogram of JW, its total staff complement and its institutional arrangements. It illustrates the functions that exist within the company and that are enablers to meeting business objectives.

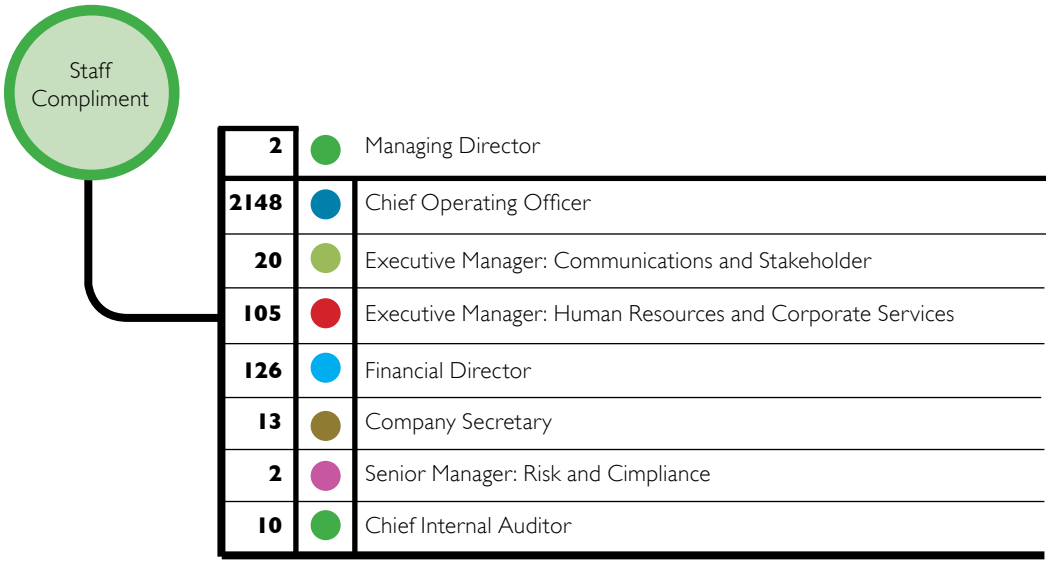
The Internal Audit Department undertook an audit to review the organizational structure and also to evaluate whether the functions are placed where they can best support the business. The recommendation by the Internal Audit Department was that there is a strong need to reorganise some business functions – such that they serve the Company optimally.

The structure, however needs to be constantly reviewed to ensure that JW adapts to changing circumstances and demands. The projected budget for the next five years has taken into account additional human resources that will be required – given the Capital Projects that need to be implemented during this period. A total of 2 700 staff will be required within five years and this has been built-in to the salary bill that is expected to increase by R40 million.

JW for 2013/14 has been allocated a R1 020 billion Capital Budget, which is about a 40% increase from the current year's budget. There is a crucial requirement for JW to ensure that it is adequately resourced in order to implement the prioritised capital programmes. JW has undertaken a process to evaluate the current vacancies – approximately 276 vacancies i.e. 9.2%– with a view to doing a planning-needs analysis for the next 12 months.

This will provide an informed view of the resource requirements for JW, as well as skills' shortages and critical skills required. The outcome will be followed by resourcing key departments that are at mainstream on Capital Project Management. The current skills' base is sufficient to achieve performance targets in the short-term. With the roll-out of smart meters, a different skills' base (electronics) will be required by 2014/15 and this will be achieved through the apprenticeship programme that is currently being established.

Figure 6: Johannesburg Water Organogram



	Managing Director
	Chief Operations • Infrastructure planning • Asset Management • Infrastructure Investments • Infrastructure /Asset Operations • Asset Monitoring & Evaluation • Strategic Management • Innovation & Technology • Water Quality Analysis • Occupational Health & Safety and Enviroment • Corporate Performance Management • Corporate Policy Management
	Communications & Stakeholder Managament • Marketing & Public Relations • Institutonal & Social Development • Stakeholder Relations
	Human Resources and Corporate Services • Legal Services • Corporate Services • Employment Equity & Recruitment • Human Resources • Labour Relations • Employee Wellness
	Finance & Administration • Financial & Management • Accounting • Supply Chain • Information Technology • Meter Reading Management
	Company Secretary • Knowledge Management • Corporate gorvenance
	Enterprise Risk Management • Risk Management & Compliance
	Internal Audit • Internal Controls

Figure 7: Business Units and Functions

7.1 Business Functions

The attainment of the programmes that have been prioritised in line with the CoJ Priorities and IDP Flagship programmes will be supported by various business functions within JW. The Business Units will provide all the required support to the Company to ensure that the outcomes of the programmes are implemented in 2013/14 and beyond, as follows:

BUSINESS UNITS & FUNCTIONS

Communications and Stakeholder Management

- Explore and Implement a radio-based forum where JW and communities can engage around service delivery related matters, in addition to the City's Customer Call-Centre
- Influence customer behaviour through education and awareness programmes, as well as information sharing about JW services.
- Ensure notification of customers on planned maintenance which result in interrupted water supply.
- In addition to other forms of media communication, forge partnerships and work with CBOs and NGOs to implement sustainable public education and awareness programmes

Information Technology

- Support the Smart Water Meters initiative by providing IT infrastructure and systems to facilitate the transmission of data from smart meters to IT Data Warehouse.
- Reliable IT systems. Ensure IT systems are available (95% up time) and deliver the right information (quality) at the right time (speed).
- Design and implement an integrated management information system. A system (e.g. dashboard) that reports on the operations of the business units in the organisation
- Enable the operation teams to access the company's works management and preventative maintenance systems on-line and real-time through mobile computer devices.

Finance

- Maintain Profitability and cash flow to support the organisation's financial sustainability.
- Improve on metering, to generate strong cash flows to fund 10-year R25 billion capital requirements, while maintaining good liquidity and solvency ratios.
- Balance Tariffs affordability with cash flows requirements to ensure servicing of loans raised to finance CAPEX

Health and Safety

Occupational Health & Safety will create of safe and healthy environment for employees, contractors and community through:-

- Hazardous risk assessments
- Rollout of Personal Protective clothing where applicable
- Training of employees on OHS compliance
- Audits and corrective actions on deficiencies if noted
- Medical surveillance
- Monitoring for compliance with OHS Act & NOSA requirements

BUSINESS UNITS & FUNCTIONS

Human Resources& Corporate Services

The company has a three year EE plan with target for each year, as reflected on the Table 13 below and at the end of each year an assessment is done to see if targets are met. If not met strategies are devised to achieve the targets. The company has met the target for people with disabilities which were set at 2.5%.

Training & Development

- Introduce the Apprenticeship Programme to provide Artisans and Technicians skills pipeline
- Implement National Treasury MFMA training of Financial , SCM and Senior Managers
- Develop a cadre of middle and senior managers through leadership development programmes
- Use retired plumbers and artisans to train community members on basic plumbing skills to prevent water losses through leaking taps and provide service to their community.

Talent Management

- Continue with Engineering Capacitation Programme for ECSA registration for engineering professionals.
- Provision of bursaries to members of the community to address technical and other scarce skills pipeline.

Recruitment, Selection and Employment Equity

- Ring-fence a percentage of vacancies and employ the unemployed to contribute in the programmes to eradicate unemployment.
- Increasing women representation by 2% year on year.

Governance

- Through Company Secretariat Board of directors are provided with support for ensuring that. Board procedures are followed. Applicable rules and regulations are complied with, Board is acting in its capacity as such
- Ensures compliance with statutory and regulatory requirements and ensures that decisions of the Board of Directors are implemented.
- Knowledge Management with the Company

Strategic Business Support.

- Provides laboratory services for ensuring compliance of water & treated effluent to quality standards
- Undertakes innovation and technology functions for key innovative interventions that will provide efficiency and effectiveness.
- Undertakes research and development to inform strategic decisions and implementation of flagship projects.
- Ensures Business Processes are in place and functioning, such as strategic planning, performance and policy management.

Supply Chain

- Promote the Green Economy and Shift to Low Carbon Footprint through procurement policies.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Current Staff Establishment

Table 14 & 15 below depicts staff complement as at 12/13 FY and EE Plan for 2013/14 respectively.

Table 14: Current Employment-Equity Levels

	African		Coloured		Indian		White		Totals		Total
Occupational Levels	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	
Top Management	1	3	0	0	0	1	0	1	1	5	6
Senior Management	1	2	0	0	0	0	0	1	1	3	4
Prof. qualified and experien. specialists and mid mangement	45	61	1	2	4	8	8	37	58	108	166
S. tech,Ac. quali. work, Jun. manage, Superv, formen, Superint	119	433	5	37	7	14	11	76	142	560	702
Semi-skilled and discretionary decision making	122	393	6	10	0	0	5	8	133	411	544
Unskilled and defined decision making	191	799	10	16	0	2	0	5	201	822	1 023
Grand Total	479	1 691	22	65	11	25	24	128	536	1 909	**2 445**

The company has a three year EE plan from 2012 to June 2014 with target for each year and at the end of each year an assessment is done to see if targets are met. If not met strategies are devised to achieve the targets. The company has met the target for people with disabilities which were set at 2.5%. Gender representation is a priority and it is reflected in the plan where the company is committed to increase female representation by 2% year on year..

Table 15: The assumption is that there will be no growth to staff compliment

Occupational levels	Race				
	African	Coloured	Indian	White	Total
Top management	3	1	1	1	6
Senior Management	3	0	0	2	5
Professionally qualified and experienced specialist and mid management	115	10	15	47	187
Skilled technical and academically qualified workers, junior management	474	42	24	94	634
Semi-skilled and discretionary decision making	531	31	16	16	594
Unskilled and defined and defined decision making	1 026	53	25	5	1 109
Grand Total	**2 152**	**137**	**81**	**165**	**2 535**

The following targets below were approved as overall targets to be achieved at the end of the previous EE Plan, in June 2014. These targets were informed by data obtained from Census 2001. The overall targets will remain unchanged for this EE plan and will be reviewed at the end of June 2014, to factor in the results of the Census 2011. The targets are as follows:

- Africans: 72%
- Coloureds: 6.5%
- Indians: 3.6%
- Whites: 17.4%

The employment of the youth is done via the bursary and internship programmes.

The strategies of the bursary and internship programmes focus on service delivery and social responsibility issues. They aim at the following:

- Providing previously disadvantaged students, in the first instance, the opportunity to further their qualifications.
- Enabling the company to focus on future competency requirements by identifying and filling talent gaps.
- Empowering youth with the necessary skills to ensure that they become marketable.
- Creating an opportunity for students who have completed their studies to familiarise themselves with the working environment and gain practical experience.
- Increasing the awareness among young people of the job and career opportunities in Johannesburg Water.

Gender Representation

Projection is based on staff compliment of 2400								
	Actual	Target year 1		Target year 2		Target year 3		Outcome
Period	As 30 June 2011	2011/2012		2012/2013		2013/2014		
No. of Staff	447	+49	496	+50	546	+50	596	474
Percentage	18.43%	2%	2%%	2%	24.43%			

The company is planning to increase female representation by 2% year on year. The achievement of this target will be supported by specific strategies as indicated in the implementation stage. As at July 2008 female representation was 20.39%. There was a positive increase in female representation in the first half of the previous EE plan. Female representation moved from 20.39% in July 2008 to 22.07% in December 2009. It should be noted that Project Phakama had an impact in female representation in the company. Project Phakama saw the transfer of 312 staff of which 204 were females. Female representation dropped from 22.07% to 16.1% in January 2010 post Phakama Project. From January 2010 (post Phakama) female representation increased by 2.33% from 16.0% to 18.43% as at June 2011. The increase may be attributed to the strategies which were implemented to increase female representation.

Table 16: Stretch targets (year three from 01 July 2013 to 30 June 2014 and Targets for Female Representation per Race and Occupational Levels

Occupational Level	Female Representation	Totals Female
Top Management		
30.04.2013	1	1
% actual staff	16.67%	
Targets Set for June 2014	24%	
Variance	-7.33%	
Senior Management		
30.04.2013	1	1
% actual staff	25.00%	
Targets Set for June 2014	24%	
Variance	1.00%	
Prof. qualified and experien. specialists and mid management		
30.04.2013	45	58
% actual staff	27.11%	
Targets Set for June 2014	24%	
Variance	3.11%	
S. tech,Ac. quali. work, Jun. manage, Superv,formen,Superint		
30.04.2013	119	142
% actual staff	16.95%	
Targets Set for June 2014	24%	
Variance	-7.05%	
Semi-skilled and discretionary decision making		
30.04.2013	122	133
% actual staff	22.43%	
Targets Set for June 2014	24%	
Variance	-1.57%	
Unskilled and defined decision making		
30.04.2013	191	201
% actual staff	18.67%	
Targets Set for June 2014	24%	
Variance	-5.33%	
Grand Total		
30.04.2013	479	536
% actual staff	19.59%	
Targets Set for June 2014	24%	
Variance	-4.41%	
Overall actual as at April 2013		


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Governance Structures

JW is governed by a Board of Directors, which provides an oversight role to ensure acceptable corporate governance within the entity. The Board comprises nine (9) Non-Executive Directors and two (2) Executive Directors – this being in accordance with the Company's Articles of JW.

In 2012/13, four (4) new Board members were appointed, including the Chairperson. The Board is chaired by Ms Gugu Moloi, who was appointed on 24 April 2012.

To ensure effective governance, six (6) Board Sub-Committees have been established to provide an oversight role to JW business functions and to assist the Board in its responsibilities that it is charged with. These committees are:

Audit Committee

The Audit Committee Charter is in accordance with Section 166 of the Municipal Finance Management Act. The constitution of the committee was also aligned to this section of the MFMA and a directive from National Treasury. The Audit Committee was appointed by the shareholders at its AGM on 24 July 2012.

The role of the Audit Committee is to assist the Board by performing an objective and independent review of the functioning of the organization's finance and accounting-control mechanisms. The Committee exercises its functions through close liaison and communication with corporate management and internal and external auditors.

The Audit Committee operates in accordance with a written Charter authorised by the Board and provides assistance to the Board.

Risk Committee

The Risk Committee has the task of overseeing the quality, integrity and reliability of the Company's risk-management function. In terms of its mandate, it reviews and assesses the integrity and quality of risk and ensures that risk policies and strategies are effectively managed. The Committee membership was appointed on 24 May 2012.

Human Resources and Remuneration Committee

This Committee advises the Board on remuneration policies, remuneration packages and other terms of employment for all Executive Managers and Senior Managers. Its specific terms of reference include making recommendations to the Board on matters relating, inter alia, to policy, remuneration, bonuses and employment contracts. Independent professional advisors advise the Committee. The Committee membership was appointed on 24 May 2012.

Service Delivery and Procurement Oversight Committee

The objective of this Committee is to ensure service delivery and that the adopted Supply Chain Management Policy (the Procurement Policy) of the company is correctly and strictly applied. It also guides the Board and Executive Management on the overall operational direction of the company.

Social and Ethics Committee

The Minister of Finance – by way of the Companies Regulations, 2011 (which came into effect on the same day as the new Act) – prescribed by way of regulation 42, that every state-owned company and every listed public company must appoint a Social and Ethics Committee.

The Committee concerns itself with ensuring that the company is governed within ethical and approved guidelines and standards and that it remains a good corporate citizen through investing in the citizenry and environment.

Nominations Committee

The terms of reference of the Committee are consistent with Section 8 of the Group Policy on the Shareholder Governance of the Boards of Directors of Municipal Entities.

The Policy sets out the recruitment procedure and gives the Committee authority to recommend the appointments of the CEO/Managing Director and the Chief Financial Officer/Financial Director to the Mayoral Committee. After the Mayoral Committee approves the appointments they are formally approved by the Board, as determined by the Companies Act. The composition of the Committee is determined on an ad hoc basis, as the need to make particular appointments arises.

No appointments to the Committee have yet been made.

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8

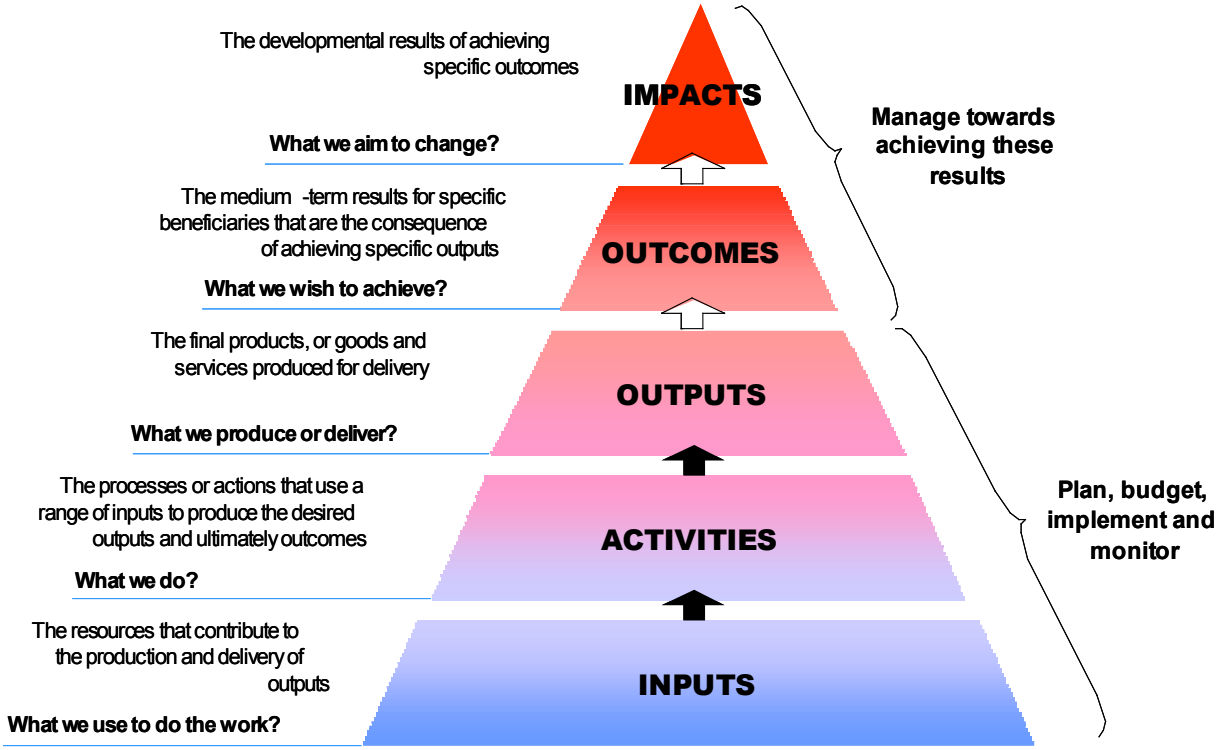
Chapter 8: **Performance Management & Measurement**

The key Strategic objectives of JW are captured in the formulated Balanced Scorecard (BSC). The Balanced Scorecard is a strategic performance-management tool that has been designed to help JW monitor its performance and manage the execution of the Business Plan and CoJ's Priorities and Outcomes.

The measurement of performance is based on the National Treasury Performance Framework – where it requires that all Measurement Indicators are SMART.

Figure 8 (below) illustrates the various layers of measuring performance and their relationships. The measuring indicators as reflected in the BSC will be measured at outcome level. The organization's 2013/14 Balanced Scorecard is included as Table 16 below.

Figure: 8 Measuring Performance



Source: National Treasury Framework for managing Programme Performance

Table 17: Strategic Balanced Scorecard

FINAL STRATEGIC BALANCED SCORECARD: 2013/14											
BSC Perspective	**Performance Objectives**	**KPI**	**Weight**	**Baseline**	**Unit Measure**	**Target 2013/14**	**Target 2014/15**	**Target 2015/16**	**Target 2016/17**	**Owner**	**Ref Number**
Increase Active & Engaged Citizenry and Create a Smart City											
Customer & Stakeholder Perspective Weight 25%	Increase Customer Services Weight 100%	Customer Satisfaction Level Index on water and sanitation as conducted by JW	20%	62	%	67	69	70	70	C&SM	1
		Percentage of Water bursts restored within 48 hours of notification	20%	91	%	95	95	95	95	COO	2
		Percentage of Sewer blockages cleared within 24 hours of notification	20%	95	%	95	95	95	95	COO	3
		Percentage meters read (actual consumption vs estimated) on a monthly basis, per CoJ's billing system	20%	91	%	95	95	100	100	FD	4
		Number of Smart Water Meters installed	20%	0	Number	10 000	0	40 000	70 000	COO	5
Outcomes/ City Priority	**Create Sustainable Human Settlements, Promote Operational Resilience & Environmental Sustainability**										
Internal Processes Perspective Weight 30%	Reduce service interruptions & ensure reliable services Weight 30%	Number of sewer blockages per 100 km of network length per annum	40%	384	Number	413	403	392	375	COO	6
		Number of water pipe bursts per 100 km on network length per annum	40%	301	Number	280	271	260	249	COO	7
		Percentage compliance with drinking water quality standard on E.Coli (SANS 241)	20%	99	%	N/A	99	N/A	99	COO	8a
		Achieve Blue Drop (BD) certification on all drinking water systems		Blue Drop certified on all systems	BD Certification	BD Certification	N/A	BD Certification	N/A	COO	8b
	Increase access to basic services Weight 30%	Percentage of households in informal settlements with access to water at minimum LoS 1	50%	97.76	%	98.32	98.59	98.85	99.06	COO	9
		Percentage of households in informal settlements with access to sanitation at minimum LoS 1	50%	91.23	%	91.73	91.96	92.18	92.38	COO	10

FINAL STRATEGIC BALANCED SCORECARD: 2013/14 (continues)											
BSC Perspective	**Performance Objectives**	**KPI**	**Weight**	**Baseline**	**Unit Measure**	**Target 2013/14**	**Target 2014/15**	**Target 2015/16**	**Target 2016/17**	**Owner**	**Ref Number**
Outcomes/ City Priority	**Create Sustainable Human Settlements, Promote Operational Resilience & Environmental Sustainability**										
	Contribute towards National Development Goals Weight 30%	Number of Jobs created based on EPWP	30%	2 679	Number	5 007	5 357	7 551	11 706	COO	11
		Number of contractors developed to CIDB grading level four (4)	30%	0	Number	0	0	0	10	COO	12
		Percentage of total BBBEE procurement recognition spent from qualifying Small and Exempted Micro enterprises	40%	109	%	130	140	140	140	FD	13
	Protect the Environment Weight 10%	Bacteria levels on sewer spills with negative impact to the river	30%	Unknown	E.coli / 100ml	Establish baseline	10% reduction from 2013 baseline	10% reduction from 2014 baseline	10% reduction from 2015 baseline	COO	14
		Achieve Green Drop (GD) certification on all WWWT	30%	5 WWTW GD Certified	GD Certification	N/A	6 WWTW GD Certified	N/A	6 WWTW GD Certified	COO	15a
		Aggregated percentage of all WWTW final effluent compliance		97	%	97	N/A	97	N/A	COO	15b
		Tons of CO^2 gas offset in Greenhouse Gases emissions	40%	New	Tons CO2	3 095	6 190	9 284	9 284	COO	16
Outcomes/ City Priority	**Ensure Financial Sustainability, Resilience & Return on Investments**										
Financial Perspective Weight 25%	Improve financial ratios Weight 40%	Percentage Non Revenue Water (% UFW for 13/14)	40%	30	%	29	30	25	20	COO	17
		Household water consumption per capita	10%	227	l/c/d/	204	191	204	217	COO	18
		Achieve Unqualified Audit opinion on previous financial year	30%	Qualified Audit opinion including revenue	AG Report	Un-qualified Audit opinion including revenue	Clean Audit opinion including revenue	Clean Audit opinion including revenue	Clean Audit opinion including revenue	FD	19
		Net Profit before bad debt provision	20%	1 560	R" billion	1 634	1 591	1 710	1 939	FD	20
	Improve liquidity / cash flows Weight 40%	Bad debts as a percentage of revenue sales	100%	13	%	8	7	6	5	FD	21

FINAL STRATEGIC BALANCED SCORECARD: 2013/14 (continues)											
BSC Perspective	**Performance Objectives**	**KPI**	**Weight**	**Baseline**	**Unit Measure**	**Target 2013/14**	**Target 2014/15**	**Target 2015/16**	**Target 2016/17**	**Owner**	**Ref Number**
Outcomes/ City Priority	**Ensure Financial Sustainability, Resilience & Return on Investments (continues)**										
	Improve infrastructure condition Weight 20%	Percentage confidence on asset inventory data integrity	50%	8	%	90	92	94	95	COO	22
		Renewal rate of water and sewer networks; and wastewater treatment works electro mechanical components based on value	50%	0.2	%	1	1.5	2.5	3.5	COO	23
Learning & Growth Weight 20%	Ensure Organisational Excellent Weight 100%	Number of female employees as a percentage of total staff complement	25%	18	%	20	22	24	26	HR&CS	24
		Percentage retention of employees identified as critical skills as per the annual skills analysis.	25%	96	%	97	97	97	97	HR&CS	25
		Total training expenditure as percentage of identified ratio of total payroll	20%	1.52	%	1.4	1.5	2	2	HR&CS	26
		OHS compliance through the NOSA system rating	30%	3	NOSA star rating	4	5	5	5	COO	27

Notes

Notes

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