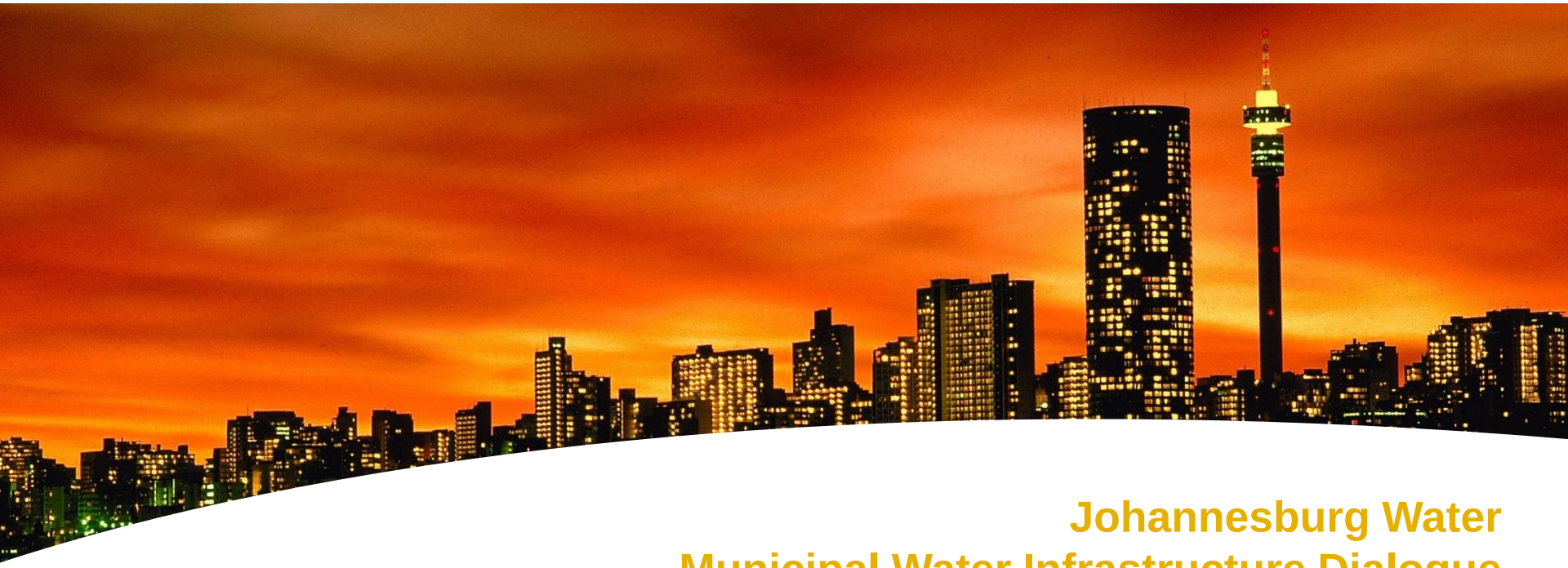


Johannesburg Water
Municipal Water Infrastructure Dialogue

21 May 2018

Content

State of water business

- How is the water business running in your municipality in general?
  - Do you consider the municipality able to meet the core water needs of consumers, business and agriculture?
  - Does your municipality recover costs?
- How do you manage billing?
- How would you describe the current payment culture?

Investment need

- How does your municipality currently finance capital infrastructure projects?
- The finance ministry in this year's budget speech announced a significant cut in municipal infrastructure grants. Does this affect how your municipality is planning to proceed with capital projects?
- Does your municipality currently outsource any part of its water service provision? If yes, how long has the municipality been doing so?
- What is your municipality's most pressing need for water provision?
- What major water or wastewater infrastructure projects are planned at present?

Private sector participation

- What are your key challenges in attracting private sector investment and participation?
- What kind of support do you require from the private sector regarding water infrastructure?

State of the Water Business

How is the water business running in the City of Johannesburg?

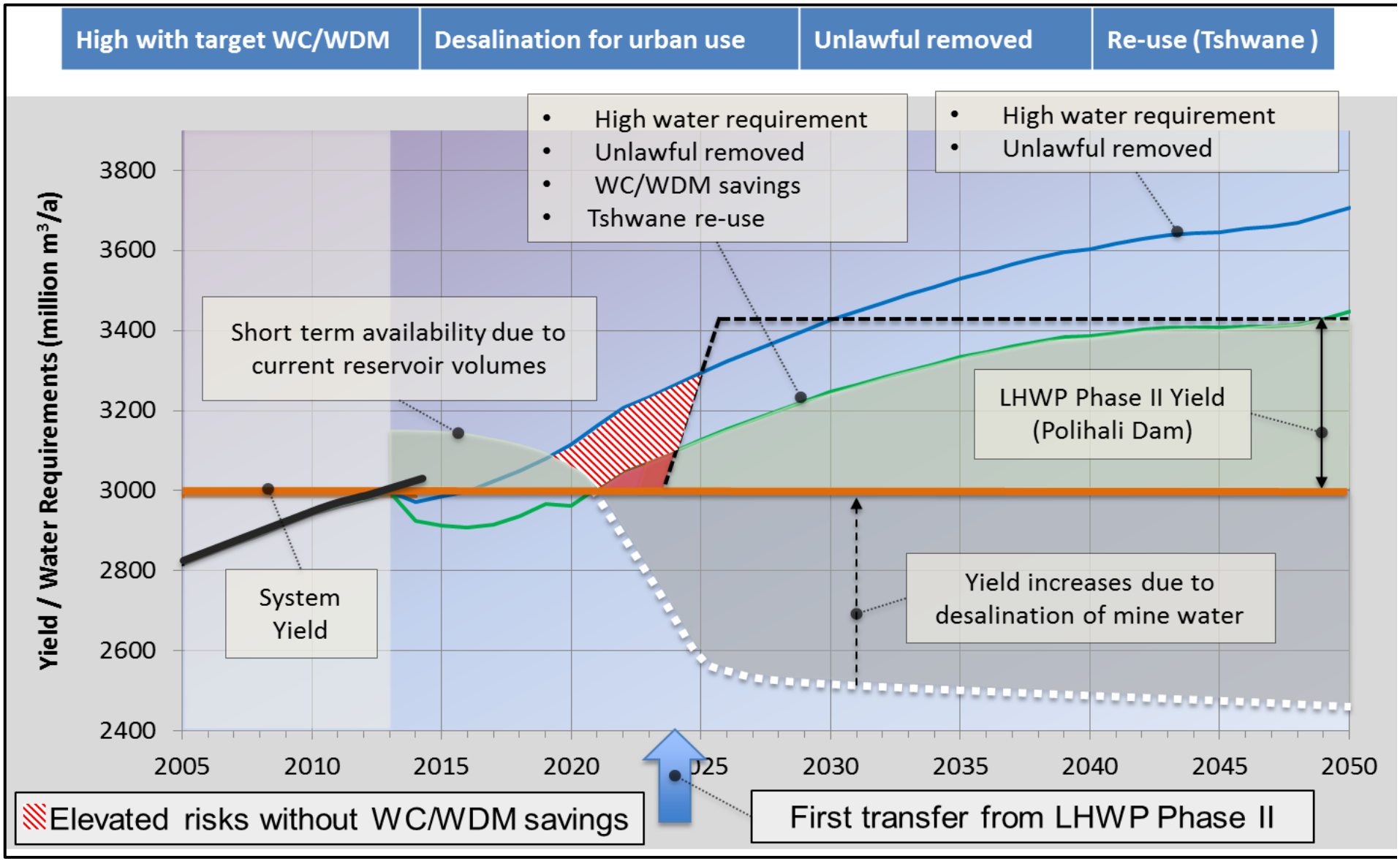
- Johannesburg Water is a municipal entity, wholly owned by the City of Johannesburg and is mandated to provide water and sanitation services to the residents of Johannesburg.
- Johannesburg Water provides these services to an area stretching from Orange Farm in the south to Midrand in the north, Roodepoort in the west and Alexandra in the east, with 10 network depots and six wastewater treatment plants.
- Johannesburg Water has a staff complement of 2 655.
- Johannesburg Water supplies 1 515 Ml/day of potable water, procured from Rand Water, through a water distribution network of 12 066 km,122 reservoirs and water towers, and 37 water pump stations.
- The wastewater is collected and reticulated via 11 576 km of wastewater networks and 38 sewer pump stations.
- Johannesburg Water treats 841 Ml/day of sewerage at its 6 Waste Water Treatment Works, which includes 2 biogas-to-energy plants where methane gas is converted to energy.

State of the Water Business

Do you consider the municipality able to meet the core water needs of consumers, business and agriculture?

- DWS and TCTA have forecast that there will be periods of severe shortages of water due to the delayed implementation of the Lesotho Highlands Water Project Phase II – refer to the next slide with their projections.

TCTA/DWS forecast of water demand



State of the Water Business

Do you consider the municipality able to meet the core water needs of consumers, business and agriculture?

- The customer base of Johannesburg Water is broken down as follows:

	Accounts	Households / business
Water		
Residential post paid	304 723	618 956
Residential pre-paid	130 236	131 551
Residential availability	98 214	98 899
Business customers	26 350	39 475
	559 523	**888 881**
Sewer		
Residential post paid	334 466	342 182
Residential pre-paid	45 318	45 373
Residential availability	87 707	340 854
Business customers	25 132	45 564
	492 623	**773 973**

State of the Water Business

Do you consider the municipality able to meet the core water needs of consumers, business and agriculture?

- Johannesburg Water is 100% reliant on water supply from Rand Water. This poses a risk should Rand Water / DWS introduce water restrictions.
- Alternative sources of water in other metros:
  - own dams,
  - fountains,
  - re-use of treated water
- The City of Johannesburg has a negligible number of agriculture customers.

State of the Water Business

Do you consider the municipality able to meet the core water needs of consumers, business and agriculture?

- **External factors** identified as risks in meeting the core water needs of residential and business consumers in the City of Johannesburg:
  - Influx of new customers into the City and growing population,
  - Increased need for services in informal settlements,
  - Lack of alternative water resources,
  - Limited supply of water through Vaal River schemes,
  - Culture of non-payment and illegal connections,
  - Above inflationary tariff increases from Rand Water, DWS and TCTA with reluctance from residents to accept these increases,
  - Economical environment, high unemployment,
  - Lack of funding in municipal environment, which results in non-investment in ageing infrastructure with huge backlogs,
  - Reduction in availability of grant funding,
  - Increase in the number of bursts on both water and sanitation networks.

State of the Water Business

- **Does your municipality recover costs?**

State of the Water Business

Does your municipality recover costs?

Johannesburg Water (SOC) Ltd

Divisional Income Statement for the period

R'000	**Budget 2018/19**	
	Water	**%**
Total Revenue	**7 416 218**	**100%**
Bulk Water Purchases	-5 624 094	-76%
Gross Margin	**1 792 124**	**24%**
Total Operating Expenditure	**-1 411 205**	**-19%**
Total Operating Income	**380 919**	**5%**
Other Income (USDG)	12 834	0,2%
PBIT Before Bad debt Provision	**393 753**	**5%**
Net Bad Debt Provision	-1 125 862	-15%
PBIT	**-732 109**	**-10%**
Net Interest Paid	-10 977	-0,1%
Profit/(Loss)	**-743 087**	**-10%**

State of the Water Business

- **Does your municipality recover costs?**

Proposed tariff for 2018/19

Kilolitres per connection per month	2018/19 Tariff (R/kl)
0-6	8.35
> 6-10	8.86
>10-15	15.13
>15-20	22.02
>20-30	30.25
>30-40	33.52
>40-50	42.79
>50	45.57

Rand Water Tariff:
R9.41 per KL

Cost per KL of water sold:
R 28.33 per KL

Is it politically possible to increase the tariff to meet costs?

State of the Water Business

How do you manage billing?

- The City of Johannesburg uses a centralised billing environment. The revenue shared services centre does billing on behalf of:
  - City Power for electricity charges
  - Johannesburg Water for water and sanitation charges
  - Pikitup for refuse removal charges
  - Rates
- This enables the customer to receive a single bill for all services.
- Meter readings occur at entity level and submitted to RSSC for billing.
- Invoicing and collections occur centrally at RSSC and paid over to the relevant entities.

State of the Water Business

How do you manage billing?

Meter reading function:

- Meter reading function consist of the following:
  - Meter readers
  - Meter reading auditors
  - Data analysis and preparation for billing
- More than 99% of meters are read on a monthly basis
- Due to meter faults and discrepancies between meter information and the billing system, an average ratio of meters billed on actual readings is around 85%, with actions in place to increase to 95%.
- Meters are read through an electronic device which uploads readings to the meter reading system/software

State of the Water Business

How would you describe the current payment culture?

- Payment levels are poor for water and sanitation services:

PAYMENT LEVEL

Johannesburg Water (SOC) Ltd

Payment level: **APRIL 2018**
R'000

2017/18	YTD 2017/18	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	Total 2016/17
Payment level (%)	82,2	84,4	84,4	78,5	84,0	83,9	85,3	78,2	81,4	83,0	78,3	83,3
Original Budgeted payment level (%)	85,8	85,8	85,8	85,8	85,8	85,8	85,8	85,8	85,8	85,8	85,8	83,5
2016/17												
Payment level (%)	83,3	40,3	133,2	95,0	62,7	87,9	73,5	74,1	70,9	126,4	62,7	
Budgeted payment level (%)	83,5	83,5	83,5	83,5	83,5	83,5	83,5	83,5	83,5	83,5	83,5	

- Low payment levels due to:
  - Culture of non-payment,
  - Poor credit control,
  - High levels of billing queries,
  - Economic conditions,
  - High unemployment rate.

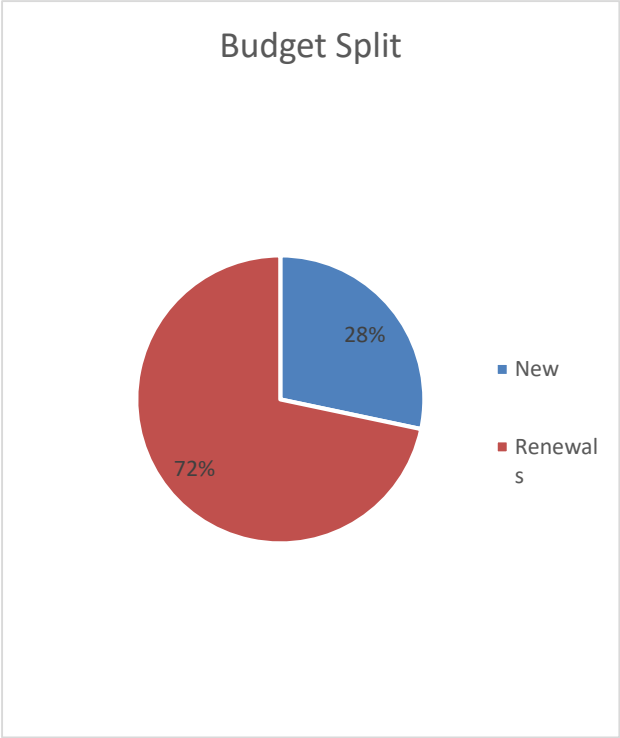
Investment Need

- **Investment need for Johannesburg Water**

Investment Need

- How does your municipality currently finance capital infrastructure projects?

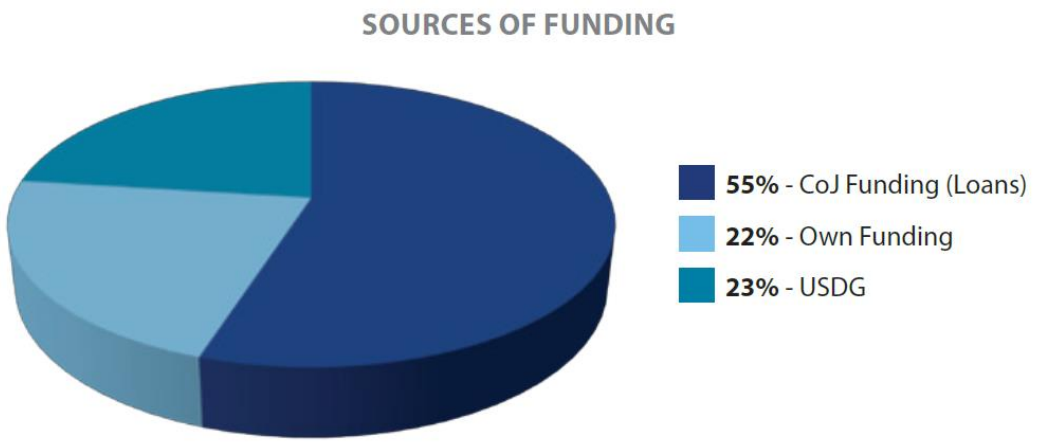
Category	2018/19 Total
Corporate Requirements	1,8%
Water Demand Management	11,0%
Operate and Maintain	8,5%
Upgrading and Renewal	42,9%
New Infrastructure	7,6%
Planning and Engineering Studies	0,8%
Information Technology	1,0%
Marginalised Areas Program	7,2%
Bulk Wastewater	19,4%
Total	**100,0%**



The budget for 2018/19 is R900m

Investment Need

- How does your municipality currently finance capital infrastructure projects?
  - Capital expenditure is financed through:
    - Own funding (Revenue)
    - Loan funding
    - USDG grants



Investment Need

- **The finance ministry in this year's budget speech announced a significant cut in municipal infrastructure grants. Does this affect how your municipality is planning to proceed with capital projects?**
  - USDG grants have not reduced dramatically for the 2018/19 budget year for water and sanitation services.
  - Reductions in equitable share will affect the City of Johannesburg, but because this is a non-conditional grant, there will be no impact on Johannesburg Water and the water and sanitation service as this is historically not allocated to provision of water and sanitation services.

Investment Need

- **Does your municipality currently outsource any part of its water service provision? If yes, how long has the municipality been doing so?**
  - Provision of some on-site services such as rental of chemical toilets, maintenance of VIP toilets, water provision through mobile trucks are outsourced.
    - 7 500 chemical toilets at annual cost of R40m
    - 55 000 VIP toilets at annual cost of desludging of R 24m

Investment Need

- **What is your municipality's most pressing need for water provision?**
  - Guarantee of supply of water for the growing population.
  - Access to capital to replace ageing water and sewer infrastructure.
  - Reduction of non-revenue water

Investment Need

- **What major water or wastewater infrastructure projects are planned at present?**
  - Water demand management
    - Water pipe replacement
    - O&M (including pressure management)
    - Retrofitting of private plumbing fixtures in low income areas and schools
    - Education campaigns to use water efficiently
    - Water restrictions
  - Bulk Wastewater Expansion and Upgrades
    - Improvement of solid treatment at WWTW by improving digestion technology and capacity
    - Capacity expansion of existing works and new wastewater treatment works
    - Biogas projects improvement of works efficiency
  - Reservoirs and Towers, increase in storage capacity with 49ML.
  - Sewer Pipe replacement 160km over next 3 years
  - Water Pipe replacement 274km over next 3 years

Private Sector Participation

- Private Sector Participation
  - Key Challenges
  - Support required

Private Sector Participation

- **What are your key challenges in attracting private sector investment and participation?**
  - Private investors require control of the asset.
  - Terms and conditions that are not in line with the MFMA.
  - Water services are rendered at a substantial loss which does not attract investment.

Private Sector Participation

- **What kind of support do you require from the private sector regarding water infrastructure?**
  - Financial support without onerous restrictive conditions
  - New technologies
  - R & D and capacity in the City is very limited.

THANK YOU