INTRODUCTION:

The City's Water Outlook was first released early in January 2018. Circumstances have changed significantly since then, in that dam levels bottomed out above 20% thanks to enforcing restrictions on agricultural users and reduction in urban consumption. The rainy season started late in April, and the region has experienced better rainfall than the past 3 years which increased dam levels by ~50%. The water outlook has thus significantly improved. For detailed background information, previously released versions of the Water Outlook can be found at **www.capetown.gov.za/waterreports**.

Dam levels have greatly improved and the City has announced that restrictions will be relaxed to Level 5 from 1 October 2018. The national Department of Water & Sanitation (DWS) has not provided any reduction in urban or agricultural restrictions. The current gazetted notice provides that restrictions would lapse only if dam levels are above 85% at the end of October. Lowering of restrictions prematurely is not advisable and needs to happen incrementally to ensure that dam storage is not compromised as there is no guarantee of how much rain will fall for the balance of this year or in next winter. Furthermore, the City's financial sustainability can be compromised if sales volumes differ significantly from those estimated in calculation on the tariffs.

The City is committed to ensuring water security and to avoid a repeat of the severe restrictions necessitated by the current drought. This requires close cooperation with the DWS to provide resilience in reconciling the available system yield with required future water sources as well as managing the supply system according to the established rules. System modelling indicates that dam levels could have been significantly higher had rules been applied appropriately.

RAINFALL 2018 IMPACT ON DAMS & RESTRICTIONS:

The South African Weather Service (SAWS) confirmed that rainfall for May and June, was 75% or higher than average, while July saw 25-75% of average rainfall. While preliminary calculations indicate that the current winter runoff has exceeded that of the past three years, it has not yet surpassed the long term average. Rainfall across catchment areas has remained highly variable with above average recordings at Wemmershoek and Voelvlei.

2018 dam behaviour can be seen plotted against that of the past 20 years. The shape of the curve for 2018 is important as it is evident that storage has been tightly managed through reduction in demand. At the beginning of 2018, dam levels were 15.5% lower than in 2017. The impact of the rainfall in 2018 can be seen on the impact on dam levels, which by the middle of July exceeded that of *2015* (which was the first year of unprecedented low rainfall) when there were no restrictions in place. A drier July and August resulted in a decline in the rate of dam level rise, but this picked up again by the second half in August, resulting in dam levels rising to 70% in mid-September.

Dam behaviour and anticipated storage is modelled by using water usage and probable runoff. The exceedingly poor rainfall in 2017 resulted in the actual dam levels dropping below the 2% probability range at the end of May, July and August 2017. A more conservative approach was then introduced, modelling dam behaviour on the same poor rainfall of 2017, with the rainy season modelled between May and October.

The City has drafted a recovery plan with a structured approach to recovering from the drought, and bedding down restriction levels, concomitant tariffs, pressures and demand. In an effort to provide relief to customers under strain of Level 6B tariffs, and given current dam levels, the City believes it to be appropriate to move to Level 5 restriction levels.

Level 5 restriction are premised on a saving of 40% urban and 50% agricultural. The impact of moving to Level 5 will be as follows:

- Change in **tariff** from Level 6 to 5 (R/kl all ex VAT):
  - Domestic **Step 1** (< 6kl): R28.90 to R21.19
  - Domestic **Step 2** (to 10.5kl): R46.00 to R34.43
  - Domestic **Step 3** (to 35): R120.27 to R52.39
  - Domestic **Step 4** (> 35kl): R1000 to R300
  - Industrial, commercial & institutional (ICI): R45.75 to R37.50

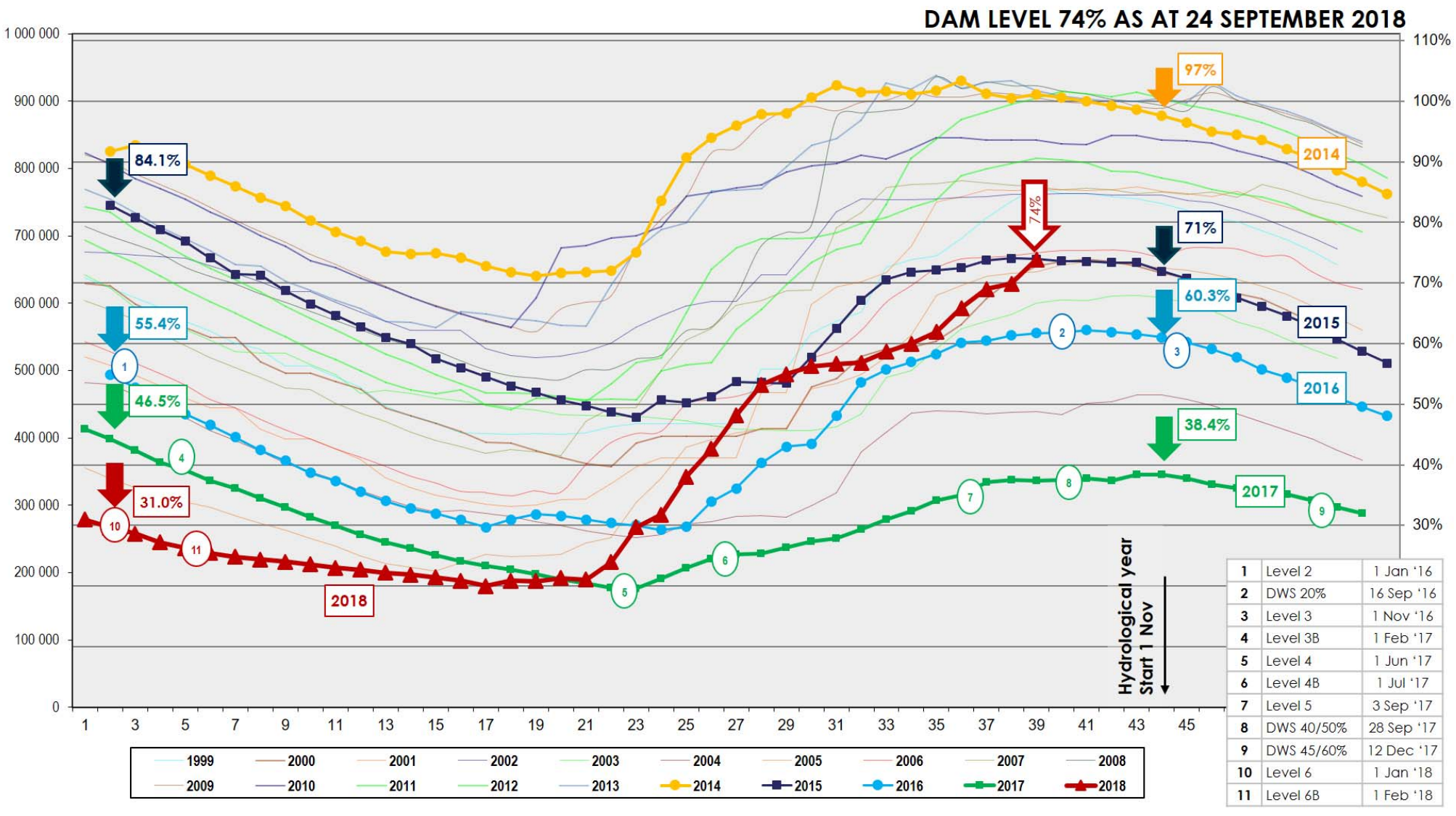
  (note no change to fixed charge – constant irrespective of level)
- Change in **restriction** from Level 6 to 5:
  - Daily demand for Cape Town increased from 450 to **500MLD**
  - Theoretical individual usage increased from 50 to 70 litres per person;
  - ICI saving of 40% to be effected;
  - Physical restriction measures remain in place as for Level 6;
- Flow restrictors (water management devices) may still be installed for excessive usage and set to 10.5kl/month;
- Slight increase in pressure at critical points will be considered if feasible.

The move to Level 5 restrictions provides a moderate relief to consumers, while not having a major impact on overall water consumption, which is expected to remain close to the target of around 500 MLD. Households have the opportunity to reduce their water bills if they retain their water consumption rate. At a consumption of 6kl, a household bill will reduce by R53.20.

Due to continued dependence on rainfall and uncertainty around variability of rainfall and impact of climate change a cautious approach must be followed to safeguard the supply system from having to move to such extreme restriction levels again, and movement to lower levels of restriction will be carefully considered.

DEMAND MANAGEMENT:

While the urgency has shifted from not running out of water towards ensuring long-term water security and sustainability, official restrictions from DWS still need to be met. At present the City is on a trajectory to achieve a 41% saving, which is less than the imposed restriction of 45%. The City has thus continued with demand management interventions as the demand has been fluctuating around 500MLD for a number of weeks. This is a reduction of nearly 60% from pre-drought summer peak use resulting in a gross[1] average consumption of ~125 lcd for a population of ~4 million down from



[1] Where gross consumption includes total water produced i.e. including for commercial and industrial business, water losses etc.

200 lcd pre-drought. The average across urban metros in South Africa is approximately 270 lcd. The World Health Organisation promotes a minimum of 50 lcd (nett) for intermediate access such as in severe drought situations and 100lcd as optimal access to promote health.

WMDs: The City has been installing water management devices (WMDs) to manage debt and provide relief to indigent households for many years. The programme was dramatically ramped up to households who had not reduced consumption in October 2017, to restrict daily household consumption and safeguard against the impact of leaks. In many cases this was due to undetected leaks, but under Level 6 restrictions, the City has been installing these where consumption is higher than 10.5kl/month.

The rollout was aimed at hitting highest consumption first, with a target of 3,000 installations a week. In the past 9 months, the number of high consuming non-indigent households has reduced by more than 61% and indigent households by at least 44%

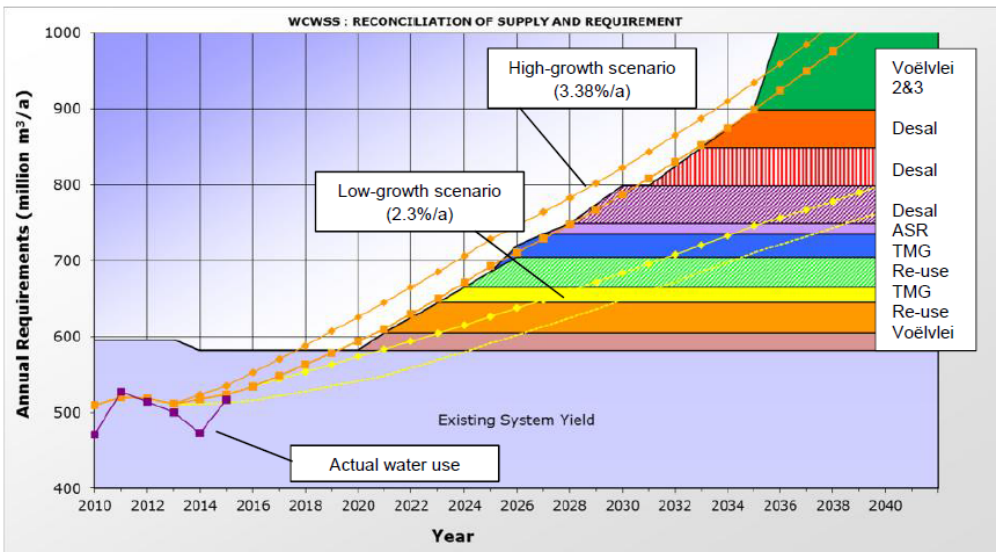
The rapid rollout resulted in spikes in WMD "no-water" notifications of which the majority of calls logged have been due to undetected leaks and households depleting the daily allocation and not due to faulty installation or meter issues (~15%). While extreme restrictions are in place, consumers are urged to be vigilant in leak detection as the current tariffs result in bills rapidly ramping up with excessive water use.

The pressure management programme saving as at 7 September was **69.5MLD** comprising pressure reduction, reticulation leak repairs & repair of internal household leaks.

Pressure management has been introduced on **166 zones** across the City covering 5 567 km of the 10 594 km total length of water reticulation so far. On completion of the current contract, it will be 6 494 km, achieving 61% of total reticulation in less than a year. The programme will continue until all zones have integrity and can be controlled to ensure optimal water conservation.

SUPPLY MANAGEMENT

During the drought crisis, the City focussed on driving down demand and initiated some short term augmentation projects as part of the water resilience programme. Interactions with DWS were aimed at optimising management of the system of dams and ceasing agricultural releases once restriction levels had been met. As dams are now in a more stable situation, the focus in consultation with DWS needs to move towards water resilience for the supply system. This includes improving governance, catchment management, supply system management, system yield under updated hydrology and confirming allocations.



The reconciliation strategy status is currently in the process of being updated from the 2016 report shown above to reflect the impact of the drought and any other factors on the system yield. For Cape Town alone, accounting for anticipated growth will require an additional 30 MLD every year. Additional water schemes will thus be a requirement into the future.

Review of Cape Town Augmentation: Third party expert advice on augmentation resulted in a change in focus at the end of 2017. This was again confirmed in 2018 when a second desalination expert provided advice to the City[2].

DWS is responsible for developing further surface water schemes which form part of the WCWSS reconciliation strategy. Responsibility for non-surface water schemes has not been conclusively defined. Where groundwater enters the municipal reticulation system, it appears logical to be a municipal responsibility. Similarly, treating municipal wastewater to potable standard can be reasoned to be a municipal responsibility as wastewater treatment works are owned and operated by the municipality and in the case of Cape Town, these lie within the metropolitan boundary. Aligned with these considerations, the City has committed to the following:

- **Groundwater:** the maximum combined yield in the first phase provides ~100 MLD. The cost of operating the three groundwater schemes will inform the speed of roll-out, and once the Phase 1 schemes are operational, the development of further phases and schemes are expected to be easier;
- **Re-use:** Water re-use schemes include both recharge of Cape Flats Aquifer as well as treating water to drinking standard at Faure treatment plant to provide 70 MLD. Depending on costs and on the long-term city growth requirements, this is likely to be extended to other wastewater treatment works around the metro;
- **Desalination:** The cost and complexity of large-scale desalination projects requires significant time to develop. The optimal location, scale, responsibility and timing is still under consideration.

Over the past year, the City initiated a number of small scale augmentation projects delivering modest yields which were not in sequence with the reconciliation strategy:

- Springs & rivers – consistent yield of **7.5 MLD** increasing during rainy season;
- Atlantis aquifer – sustained yield of **5-12 MLD**;
- Temporary desalination – maximum yield of **16 MLD**. To date this has peaked at ~12 MLD with Monwabisi, Strandfontein and the V&A plants now operational;
- Temporary transfers – Groenland agricultural water user association transfer provided **7 MCM** (million cubic meters) in the first quarter of 2018.

Augmentation Projects Committed to and in Progress

- **Cape Flats Aquifer (CFA):** License conditions provide for three phases of extraction of 20, 25 & 30 MCM/yr respectively. This translates to a sustainable yield of 55 – 83 MLD and a peak yield of between 83 – 124 MLD. Conditions have been such that progress has been slower than planned, but the licensed yields are the ultimate target for permanent augmentation. The license conditions require artificial recharge of 12 – 25 MCM/yr for the 3 phases, for which the projects are in design;
- **Table Mountain Group (TMG) aquifer:** License conditions cover three phases at a number of locations providing for yields of between 42 & 130 MCM/yr translating to 115 – 355 MLD sustainable yield. As with CFA, it may take considerably longer than originally planned to realise the yield but work will continue mindful of the licensed yields. Due to environmental sensitivities, initial work will be confined to Steenbras which license provides for 12-35 MCM/yr translating to 33-96 MLD over the three phases;
- **Atlantis & Silwerstroom aquifer**: potential for an additional 20 MLD – injection into the system in design;
- **Berg River Voëlvlei augmentation scheme** (BRVAS) in progress by DWS to yield **60 MLD** by 2021;
- **Zandvliet temporary re-use** scheme was part of the Section 29 projects funded in Dec 2017, and will be complete at the beginning of 2019;
- **Faure permanent re-use:** This project is in design to provide 70 MLD (expandable to 100 MLD) of re-use water from Zandvliet & potentially Macassar into the raw water supply at Faure from Steenbras at Faure water treatment plant;
- **Alien vegetation clearing:** The impact of unmanaged aliens on the system yield has been calculated as significant, currently in the region of 20 MCM. The city has accelerated programs in its own catchment areas and will work with other spheres of government and stakeholders to cover all relevant catchments.

Augmentation Still to be Triggered:

- **Permanent desalination:** procurement of a permanent desalination plant has not commenced. A project is in progress to enable water quality sampling over an extended period to feed into the site selection process for permanent desalination. While the immediate requirement to augment supply has not been agreed, undertaking an updated feasibility study is seen as a no-regret endeavor.

CITY WATER STRATEGY

The City has embarked on developing an integrated strategy to inform decisions on Cape Town's water future. The strategy will (amongst other things) determine the preferred augmentation programme in consideration of various scenarios of climate change, consumer behaviour, level of assurance and institutional arrangements. The cost of water sources other than surface water necessitates careful consideration given the permanent impact of augmentation on the water tariff. There thus needs to be a balance of urgent implementation of augmentation projects without incurring excessive fast-tracking costs.

SEPT WATER OUTLOOK SUMMARY

1. Collaborate with DWS to lower restrictions responsibly, while continuing to manage and monitor **dam behaviour** and **rainfall;**
2. Develop an integrated **Cape Town Water Strategy** which will crystallise the financial impact and governance issues surrounding the of level of assurance, optimal augmentation volume, resilience, timing and water sources;
3. Continue **demand management** initiatives;
4. Continue work on **augmentation projects, focus shifted to sustainability and cost efficiency**:
5. Continue managing financial impacts through appropriate adjustments to the **tariff structure** and level.;
6. Continue to improve information flows and consistency of messaging to actively **engage residents** to jointly solve problems.

Annexure A: Water & Sanitation Budget explanation

[2] Reports can be accessed at **www.capetown.gov.za/waterreports**

ANNEXURE A
Water & Sanitation Tariff Explanation
Updated 23 September 2018

INTRODUCTION
Water from the Western Cape Water Supply System including the City's Wemmershoek and Steenbras dams, is conveyed to 7 bulk water treatment plants, stored in bulk storage & conveyed to the reticulation system. Water is reticulated across the metropolitan area, and once used, sewage is reticulated to 27 waste water treatment plants. Sewage is treated to required standards and discharged as treated effluent into aquatic systems. The direct operations described above are supported by a number of ancillary functions, including[1]:

- Scientific services
- Engineering & asset management
- Water demand management
- Finance and commercial
- Support services – including HR, IT, administration etc.

The majority of the costs are fixed and not volume related – unlike electricity where the cost of purchasing energy from Eskom is very expensive, historically the cost of purchase of raw surface water has been relatively small compared to the other W&S costs. Alternative water sources will be more expensive, and depending on demand volumes, bulk costs will play a larger role in future.

Water & Sanitation operates as a tariff funded department in the City of Cape Town. Utility services are *ring-fenced* and *cost reflective*. Ring-fenced means that income and expenditure must be separately accounted for from the municipal rates accounts thereby reflecting revenues for the service and costs incurred within the W&S business. Cost reflective means that the tariffs charged must cover the costs of delivering the service. The domestic tariff is a stepped tariff whereas the industrial, commercial & institutional (ICI) tariff is charged at a flat rate. Tariffs are set to cover the cost of providing the service.

Water vs sanitation sales:
Sanitation revenue is calculated based on a percentage of volume of water provided and not measured at a household level. For free standing domestic customers this is 70% capped at 35kl per month. The sanitation service has typically been subsidised by the water service.

Water sales:
The city sells water to a host of customers, and to other smaller municipalities (Stellenbosch and Drakenstein). Around 70% of revenue from sales are received from domestic users. Of households, over 40% are provided with water at no charge (indigent plus informal households). Historical records reflect usage of patterns for each type of consumer at the relevant restriction level.

Water purchases:
The city buys raw bulk water from the national Department of Water & Sanitation (DWS). The cost is differentiated across the individual dams based on licensed allocations and has both a fixed water resource management charge based on the allocation volume and a volumetric component based on actual use. Small volumes of water produced by temporary emergency augmentation schemes came into effect during the previous financial year.

[1] For further information, see https://resource.capetown.gov.za/documentcentre/Documents/Graphics%20and%20educational%20material/Water%20Services%20and%20Urban%20Water%20Cycle.pdf

Criteria for tariff setting:
The city balances a number of criteria in determining the tariffs:

- Financial criteria based on the principle of cost recovery;
- Environmental criteria to incentivise conservation;
- Social criteria around affordability, and
- Economic criteria by allowing for marginal cost in the pricing strategy.

The aim is for the tariff to reflect the value of water and sanitation services to ensure sustainability and in a manner which provides transparency.

Tariff structure:
Restriction tariffs are part of managing demand in times of drought. For many years, the City had 3 restriction levels, providing for a saving of 10%, 20% and 30% (or Level 1, 2 & 3). In the 2017/18 budget process, the City added Level 4 restriction tariff which was introduced on 1 July 2017. Further restriction tariffs were required and Level 5, 6 & 7 were introduced at Council at the end of January 2018 in line with a special directive from the Minister of Finance.

W&S operates a stepped volumetric domestic tariff to encourage low water usage. For example, in Level 1 for water consumption, the 18/19 tariffs are:

Water use (Kl/mth)	Level 1	
Step 1: Domestic <6	12.85	Tariffs need to recover costs in the first two steps (0-6, and 6-10.5kl) for all customers except the indigent
Step 2: Domestic >6<10.5	17.13	
Step 3: Domestic >10.5<35	22.78	The third step is based on the average incremental cost of providing water to ensure sustainability
Step 4: Domestic >35	39.39	The fourth step is there to strongly encourage water conservation.
ICI	22.78	Based on the average incremental cost of providing water to ensure sustainability

Up to 2017/18 the level 1 tariffs were premised on a 10% saving from the previous drought that occurred in 2004/05, and was aligned to the unconstrained average total water demand of 325 MCM for the 5-year pre-drought average annual use (which peaked in 2014/15 at 342 MCM).

For 2018/19, the city had to adjust this base for the permanent impact of the drought based on assumptions of sales volumes in each of the steps above to add up to the total volume of water sold.

On the same principle, the tariffs on the different restriction levels are shown below. As water restrictions are reduced, the water tariff for each step will reduce as shown.

Consumption (Kl/month)	Level 6	Level 5	Level 4	Level 3	Level 2	Level 1
Step 1: Domestic <6	28.90	21.19	14.13	13.68	13.26	12.85
Step 2: Domestic >6>10.5	46.00	34.43	22.52	19.46	18.22	17.13
Step 3: Domestic >10.5<35	120.27	52.39	34.05	27.63	24.76	22.78
Step 4: Domestic >35	1 000.00	300.00	84.69	60.66	45.69	39.39
ICI	45.75	37.5	28.82	25.06	23.74	22.78

Restriction levels are based on the volume of water that is available for sale. At the current restriction (which is imposed by DWS) the City should make a

saving of 45% i.e. the average daily demand should not exceed 490 MLD over the year.

The restriction tariff is directly linked to the sales volume. Unrestricted, the volume of water the city can provide is 890 MLD or 26.7 million kl. At level 6, this volume is reduced to 14.7 million kl. Consumer consumption determines actual water use and resultant sales, which, while influenced by the city's range of demand reduction mechanisms, is not within the city's control. This results in variations between revenue projected and revenue actually billed.

Fixed basic charge:
A fixed basic charge based on the diameter of a meter connection size was introduced on 1 July 2018 to cover approximately 25% of fixed cost. This charge is not dependent on the drought – it will remain in place irrespective of restriction levels. Paying a fixed charge for services is not a new thing, for example Telkom charges for the phone line, number of phone jacks and any other services, on top of a fee per call which is differentiated by call distance and time. Similarly, mobile phone contracts include fixed subscription charges and variable call costs. Applying both a fixed and volumetric tariff provides improved revenue stability which allows for sustainable operations and maintenance of the network irrespective of the consumption levels.

The fixed charge is linked to the size of the metered connection which translates to the demand put on the system. The revenue has been calculated to cover approximately a quarter (based on 2017/18 figures) of costs not impacted upon by consumption levels. The formula for calculation of the monthly charge is based on the square of the radius of the connection (the volume supplied is directly related to the area where: Area = π x radius^2 or = π x (diameter/2) ^{2}

It should be noted that there are very few large meters in the network – 95% of meters are 20mm or less, 98% are 25mm or smaller and 99% of meters are 40mm or smaller.

Size (mm)	Number of meters	% of meters	Monthly Charge (ex VAT)
15	367,516	56.0 %	R 50
20	254,025	38.7 %	R 100
25	20,388	3.1 %	R 156
40	4,516	0.7 %	R 400
50	4,986	0.8 %	R 625
80	1,843	0.3 %	R 1,600
100	2,344	0.4 %	R 2,500
> 150	471	0.1 %	Varies

A ring-fenced service:
The annual tariff increase determines the total revenue envelope wherein W&S needs to operate. The need for increased tariffs over the past 5 years have been driven by increased urbanisation, ageing infrastructure, improved service levels, ensuring security of supply (new water resources), changes in legislation (effluent quality) and financial sustainability. Pressure to keep the tariff as low as possible has resulted in the business being under-funded for a number of years.

In the summer of 2017, the drought led to W&S projecting severe underfunding to the extent that the City's rates account was required to subsidize the service.

CAPITAL PROGRAMME
W&S capital budget has increased steadily year on year. In 2014/15 it exceeded R1bn for the first time. The original W&S capital budget for 2017/18 had grown to R1.76bn with an increased focus on augmentation projects. The new water program (NWP) added R1.4bn to the capital budget in the middle of the financial year, resulting in a total of R3.2bn, i.e. a tripling of the budget in three years.

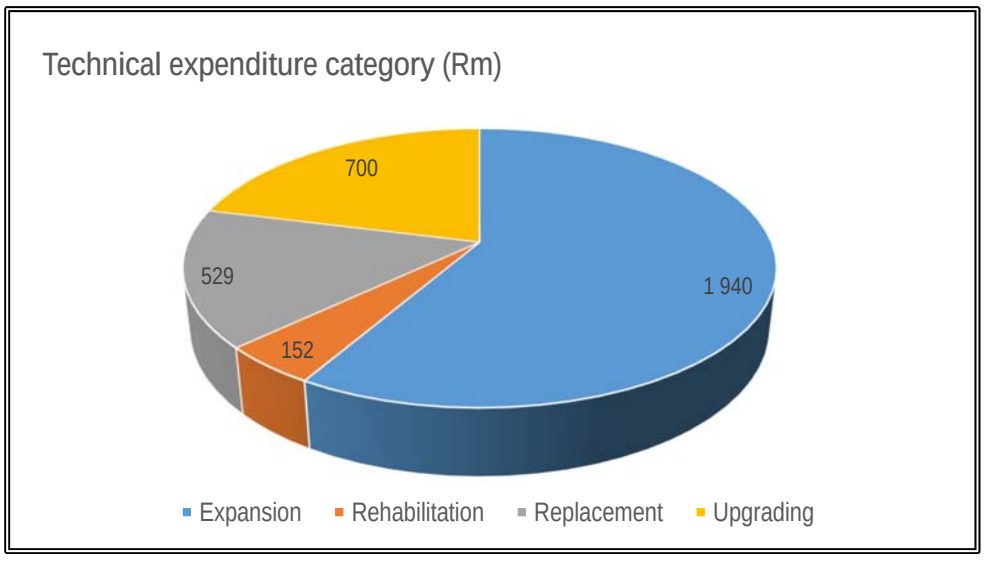
The capital budget for the current year is R3.5bn, made up of approximately R 2 bn for W&S and R1.5 bn for the NWP. The programme is funded mainly (83%) from loan funding (external finance fund or EFF) and ~17% from grant funding from National Government (urban settlements development grant or USDG). The USDG is a substantial supplementary capital allocation to metropolitan municipalities introduced relatively rapidly in 2011 that replaced the pre-existing Municipal Infrastructure Grant for Cities[2]. The grant is performance-oriented outcomes-based, in line with international best practice for public finance. The grant format promotes a differentiated local government fiscal framework and the focus of USDG is specifically on sustainable human settlements, and informal settlement upgrading. Much water and sanitation bulk infrastructure supports USDG principles.

The current percentage funding from capital replacement reserves is less than a half a percent while grant funding contributes approximately R500m towards this year's capital programme. Grant funding is the preferred funding source as grants do not need to be repaid and no interest charges are levied.

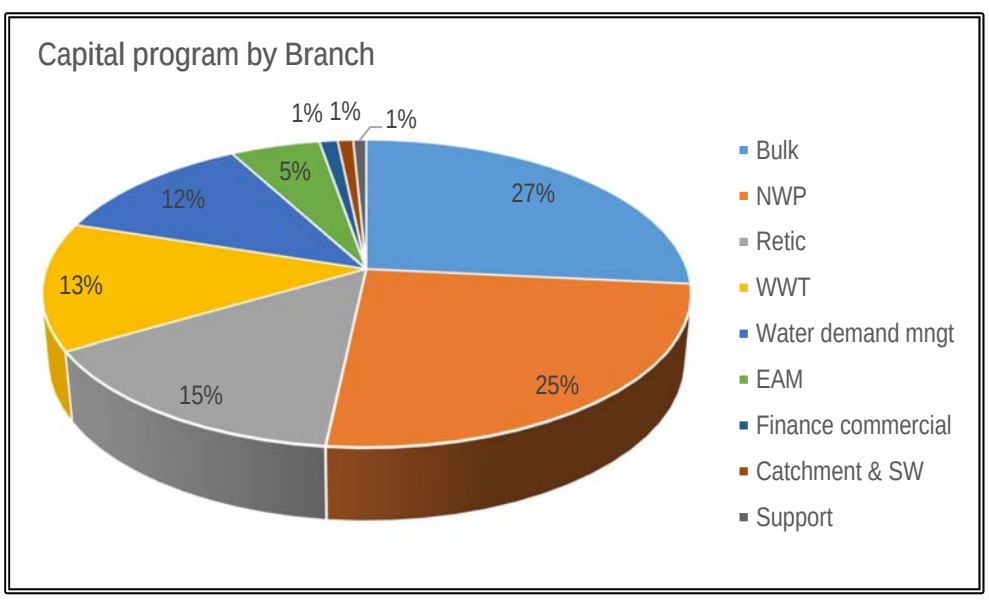
[2] For more information see [2] http://www.dhs.gov.za/sites/default/files/u16/SUMMARY%20REPORT%20ON%20THE%20DESGN_.pdf

The top water & sanitation projects in the capital programme with budgeted values above R20m in the approved 2018/19 budget are:

Element Description	Current Budget
Cape Flats Aquifer Recharge	830 000 000
Table Mountain Group Aquifer	350 000 000
Atlantis Aquifer	270 000 000
Meter Replacement Programme FY19	270 000 000
Zandvliet WWTW: Prim Treatment & Sludge	366 500 000
Replace Sewer Network (Citywide) FY19	98 400 000
Replace Water Network (City Wide) FY19	76 338 800
Bellville WWTW Extension	113 700 000
Borcherds Quarry WWTW	59 085 558
BWAS: Muldersvlei Reservoir & Pipeline	59 000 000
Bulk Reticulation Sewers in Milnerton Rehabilitation	52 000 000
Contermanskloof Reservoir	51 000 000
BW Infrastructure Replacement FY19	50 000 000
Cape Flats WWTW-Refurbish various structure	50 000 000
BWAS: Muldersvlei Reservoir & Pipeline	43 000 000
EAM Depot Realignment: 5 Nodal System FY19	40 000 000
Zandvliet Plant Re-use	38 000 000
Philippi Collector Sewer	36 000 000
Potsdam WWTW – Extension	35 000 000
Wesfleur WWTW - Capacity Extension	35 000 000
Vehicles, Plant Equip: Additional FY19	30 000 000
Development of Add Infrastructure FY19	28 100 000
IT: System, Infrastructure Equipment: Add FY19	28 000 000
Cape Flats WWTW-Refurbish various structures	25 000 000
Infrastructure Replacements - WWTW FY19	25 000 000
Macassar WWTW Extension	25 000 000
Pressure Management: COCT FY19	22 430 000
Water Supply at Baden Powell Dr to Khayelitsha	22 000 000
Zandvliet Plant Re-use	22 000 000
Northern Regional Sludge Facility	20 785 490
Scottsdene WWTW	20 016 872
Bulk Sewer (Housing Projects) FY19	20 000 000
Treated Effluent: Reuse & Infrastructure Upgrade FY19	20 000 000



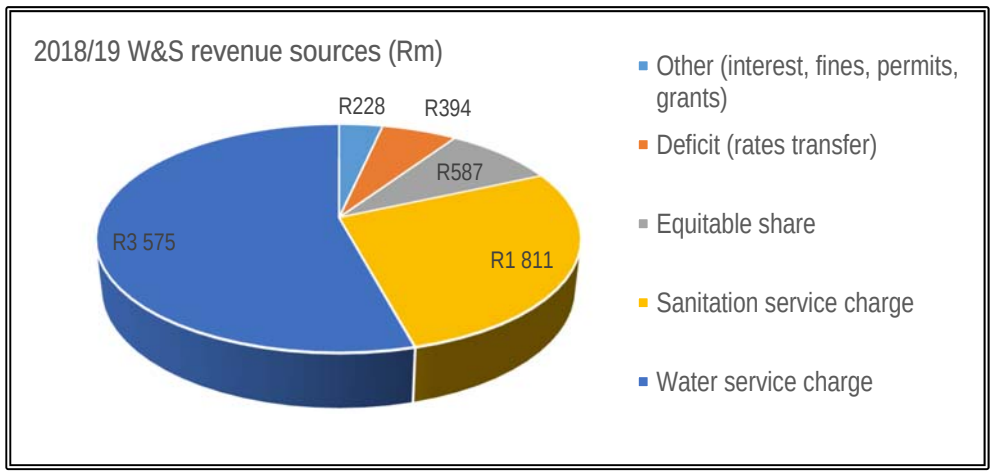
58% of the capital budget is allocated to expansion of infrastructure, 21% is attributable to upgrading existing assets, 16% to replacing and 5% to rehabilitating of infrastructure. This is currently skewed towards new infrastructure due to implementation of the new water programme.



The capital budget is spread across services as shown above – with the bulk of the expenditure in bulk water, new water programme, wastewater and

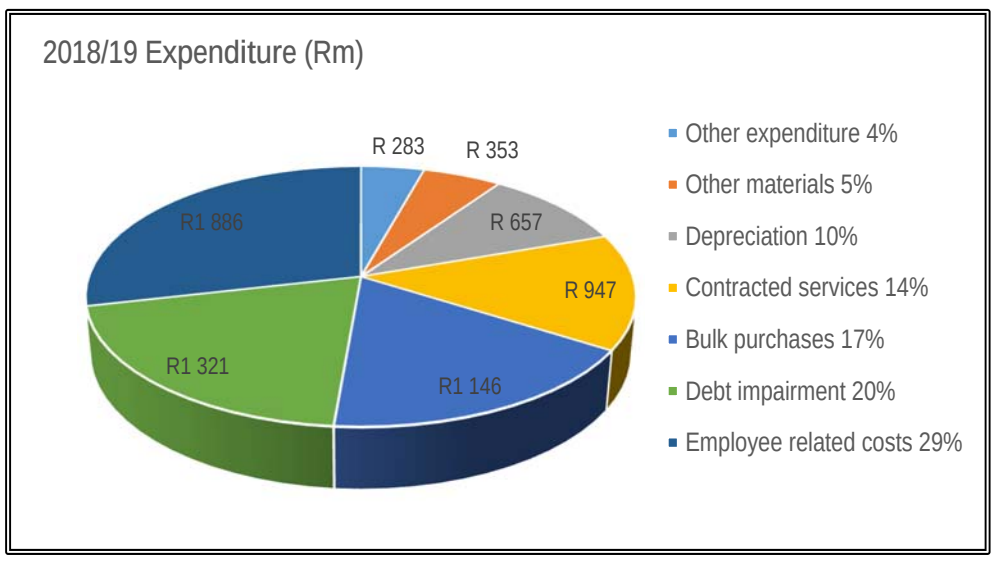
reticulation. The balance of the capital budget of nearly R170m is shared between Engineering Asset Management, Water demand management, Catchment & Stormwater management and support services. Catchment and stormwater management moved from the Roads department to W&S in 2017, and is still funded via the rates account. This will be addressed in future as the city progresses towards management of the entire urban water cycle.

UNDERSTANDING THE WATER & SANITATION OPERATING BUDGET: REVENUE

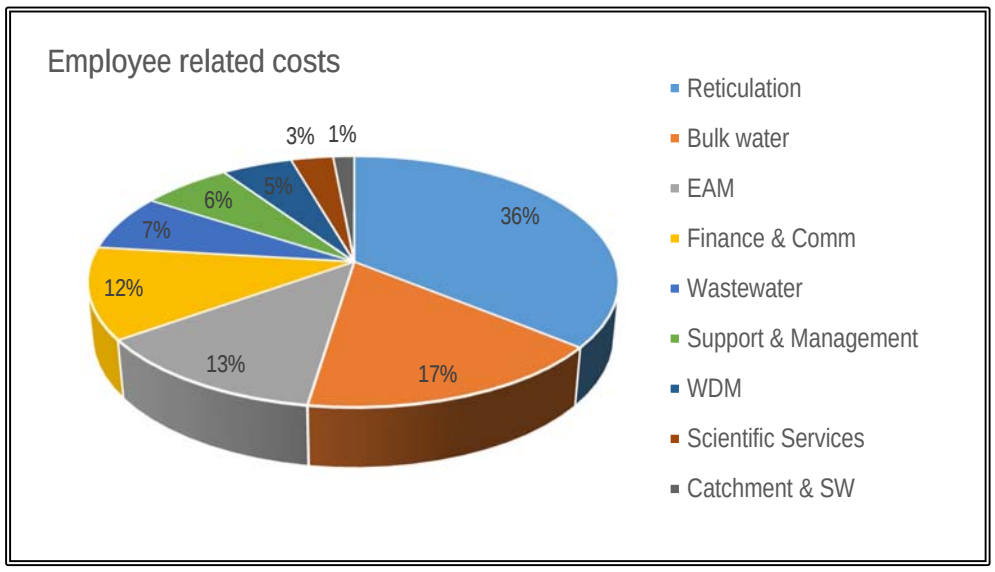


As explained already, revenue and expenditure should balance so that the cost of providing water and sanitation services should be fully covered by income. In the current year, budgeted revenue from the service amounts to R5.6bn which requires a transfer from the rates account of approximately R400m to cover expenditure. Water service charges contributes 54%, 27% revenue emanates from sanitation service charges, 9% is from a contribution from the equitable share and 3% by other revenue. Due to the impact of the drought on water sales, in the current year contributions from the rates account is funding the budget deficit between revenue and expenditure.

UNDERSTANDING THE WATER & SANITATION OPERATING BUDGET: EXPENDITURE

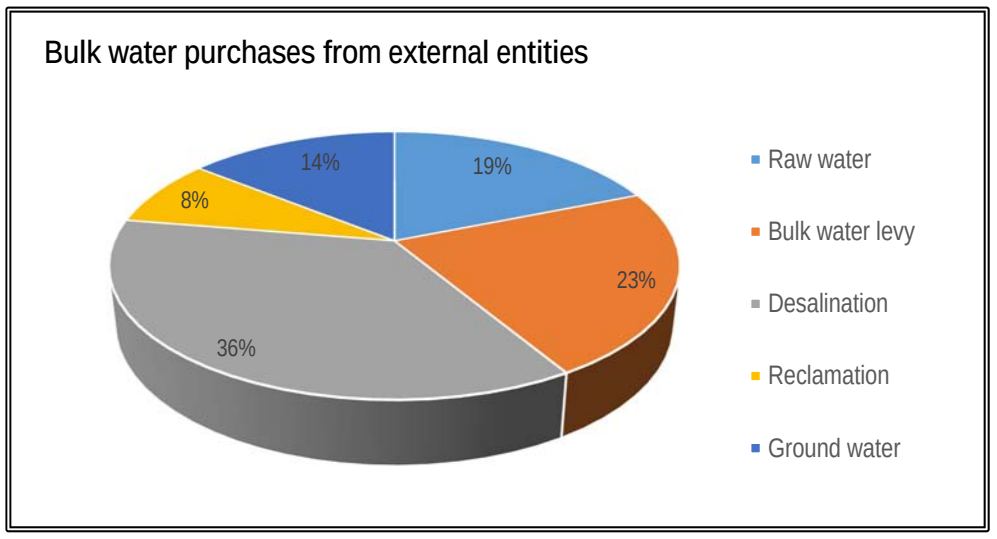


The W&S expenditure of approximately R6,594 billion break-down is shown in the diagram above, while the major cost elements are described in more detail in the charts that follow.

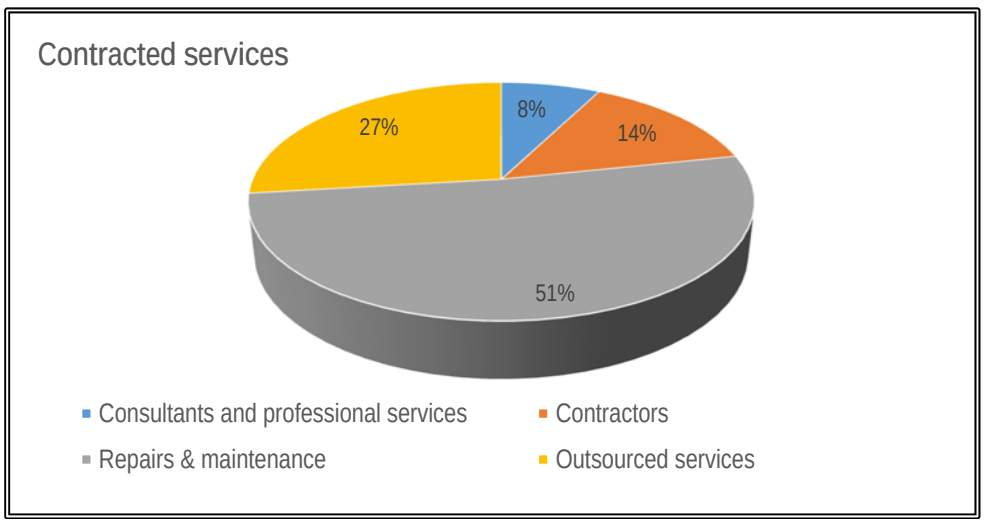


Employee related cost contributes 29% to expenditure. This split between the functional branches are shown above. The budget allocation is proportional to the number of staff employed per branch. The Reticulation branch is responsible for both water & sanitation reticulation networks and as the frontline technical branch, has the largest staff complement. The Bulk water branch shares operational responsibility of the supply scheme with DWS, and is responsible for treating raw water to potable standard to charge the reticulation network. Engineering Asset Management and Finance & Commercial are the other branches with employee related costs contributing more than 10%, responsible for asset management of all mechanical and electrical equipment (including fleet) and metering (including water management devices) respectively.

20% is attributable to debt impairment relating to the collection ratio which has dropped significantly since the onset of the drought. The provision for debt impairment is based on collection rates achieved to date and projected over the MTREF period, as well as the City's arrears and debt recovery policies.



Bulk purchases of surface water by the Bulk Water Branch amount to R1.15bn in the 18/19 budget given the increased cost of water from sources other than surface water. Note that not all the schemes budgeted were implemented and a reduction in the proposed purchases will be amended in the January adjustment budget.



Outsourced repairs and maintenance accounts for the bulk of contracted services expenditure, followed by outsourced services which include inter alia security, sewerage services, meter management.

Given the value of assets, depreciation contributes a significant value of R657m.

Conclusion

This document aims to deepen public understanding by providing information on finances of the Water & Sanitation department for the current budget year. It may be updated as required. For more detail on how the current tariff structure has evolved, please also refer to Annexure B of the May version of the Water Outlook[3].

[3] http://resource.capetown.gov.za/documentcentre/Documents/City%20research%20reports%20and%20review/Water%20Outlook%202018%20-%20Summary.pdf908