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PUBLIC PARTICIPATION COMMENTS ON THE CITY OF CAPE TOWN WATER STRATEGY DRAFT SUBMISSION BY THE ORGANISATION UNDOING TAX ABUSE ("OUTA")

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OUTA is a proudly South African non-profit civil action organisation, supported and publicly funded by people who are passionate about improving the prosperity of our nation, a nation free from the abuse of authority and governed with the efficient use of tax revenue. OUTA was established to reintroduce accountability to government and to challenge the abuse of authority with regards to the use of tax revenues.

OUTA is submitting these comments on the proposed water strategy on behalf of our OUTA supporters in Cape Town who mandated OUTA to participate in this public participation process.

OUTA also wants to commend the City in its efforts to promote, preserve and protect this resource to ensure sustainability of quality access to drinking water and sanitation services for consumers.

Executive Summary

The City of Cape Town (CoCT) is to be commended for preparing a new water strategy paper (in current draft format) as part of its Water Service Authority mandate and making provision for public participation in reviewing the draft document. This is especially important in light of the severe drought (2015 – 2017) recently experienced in the Cape and the public's understandable (and justifiable) concern with regards to the quality, transparency and accountability of long-term water security planning. There is certainly an expectation by the public that the CoCT should be transparent with regards to new water supply infrastructure planning and the mix of other water saving initiatives (including water demand management / WDM). Furthermore that politicians and professional staff (notably the Water and Sanitation Department) is to be held accountable to ensure timeously, sustainable and cost-effective infrastructure planning and implementation to ensure the dreaded 'day zero' is prevented as the resulting knock-on effects of impact to economy and expected damage to water infrastructure (from intermittent supplies) are but some of the devastating consequences to consider.

OUTA's brief review of the strategy paper has found that the strategy document is fairly comprehensive and generally a positive step forward in improving transparency and accountability for the indicated planning horizon up to 2040. There are however some real concerns with regards to the following as summarised below:

- **Water use (demand) & pre-drought norms**: We disagree with the CoCT's assessment statement that customer's water use will not revert to near pre-drought norms (given enough time). We don't believe a sufficient data analysis / case study literature review have been presented to provide a convincing case that this will not be the case. Whilst this scenario is certainly not to be encouraged, the reality is that over time (likely 5 years +) and given favourable annual winter rains (during a possible cycle of 'wet' years), people will incrementally revert back to near pre- 2015 drought norms unless rising but fair and essential block-tariff pricing (which is subject to political interference & economic outlook) are consistently implemented and prevention of water wastage is actively enforced on an annual basis and that implementation of incentives and water security 'health checks' are well communicated on a continuous basis to all customers.

- **Recommendations for augmented water supplies set out in the National Development Plan must be adopted by the CoCT on a continuous basis**– The Strategy Paper should clearly state that recommendations by National Government (notably those of the most recent National Development Plan and water-sanitation specific schemes promoted by DWS in consultation with CoCT) must be considered at all times in the CoCT's Water Strategy and that these should be adopted going forward. As also indicated in an article by Mr Mike Muller (former DG, Water Affairs, June 2018)[3 & 4], the city took a risk and knowingly chose to delay National Development Plan 2012 recommendations even when the DWS (Department Water & Sanitation) warned back as far as 2007, that increased water supplies would be needed by 2015. As has been highlighted with the recent near-crippling 3-year drought, *timeously* insurance by way of investment in water supply augmentation is preferable above the severe consequences when this is not done.

- **Making more timeously provision for private sector waste-water re-use incentives**: Although treated waste water re-use are mentioned (notably in table 1 as a committed municipal water project for 2023), it is disappointing that not more strategic incentives (with SMART targets) are listed for working with the private sector (commercial & industry) to make readily available raw or treated waste water at minimal cost at selected discrete locations. Thereby allowing further treatment (up to desired level) by the private sector, with resultant saving on potable water usage. It must be recognised that not all industrial / commercial customers require potable water for all operations. Examples are golf courses, farms, nurseries, car-wash facilities, water intensive process industries (non-potable), and large privately-owned parks / gardens to name a few. This incentive can also be a stimulant for further job opportunities

- **Growth & urbanisation projections affecting future water demand**: The Strategy Paper does not mention the assumed / estimated population growth (including economic growth impacting on year-on-year water demand increases) adopted for each of the four scenarios as well as the Base Case Plan scenario (most likely scenario). Between 2000 and 2015 the CoCT experienced a population increase of around 30% (see ref 3) and it is reasonable that urbanisation will continue albeit at a lower expected rate. The strategy must be clear and transparent in this regard and briefly indicate how these design input figures have been determined and how / when these will be reviewed during the 21-year strategy-planning window.

- **Tariffs and Pricing**: The Strategy Paper does not mention clearly what checks and balances will be used to ensure pricing reflect customers' ability to pay nor does it clearly highlight who oversees

the CoCT when setting new tariff structures. The role of DWS and timescale for periodic reviews must be highlighted.

- **Tariff structure going forward:** The Strategy Paper still contains too much uncertainty with regards to likely tariff structure pricing that will be adopted for the near future. Although agreed that it may be challenging at present to do this for all years up to 2040, **it is considered wise and preferable to make known the expected tariff pricing band with annual increases (where appropriate) for the next 5 year window leading up to 2023**. Alternatively and at the very least **clear dates should be provided when this information will be published**. It is also recommended that tariff pricing be developed for each of the modelled scenario's to sense-check financial viability of high-demand and stepped climate change scenarios. This will allow for more transparency and accountability in advance decision making in this regard, further allowing greater confidence in committed (but cost effective) water augmentation schemes progressing.

OUTA's detailed list of commentaries with regards to the CoCT's Water Strategy is indicated below. An easy to understand categorisation approach (as shown below) has been adopted to reflect the nature of the commentary. It is strongly recommended that the CoCT review and adopt further recommendations as set out in this commentary to ensure highlighted shortcomings can be addressed.

Methodology used: Commentary and referencing approach

Page numbers as referenced in this commentary, are those printed at the bottom of each page (CoCT Strategy Paper). Similarly, headings are those used in the original Strategy Paper unless otherwise indicated. Commentary upon the CoCT's Draft Water Strategy as provided herein, have been highlighted with one of the following categories (below) to indicate our view of matters for ease of reference and constructive review / editing.

Category	Symbol
in agreement	✓
disagree / needs review / concern	✗
more recommendations for improvement	→

Detailed commentary:

Vision and principles

Page	Key-word(s)	Commentary	Category
1	water sensitive city – by 2040	As also indicated in the strategy paper, not only must the city manage water demand rebound, but it must also pave the way for continued water saving device / technology adaption, urban drainage system embracement and surface water / wetland / aquifer recharge initiatives. Easier initiatives could be targeted sooner and more challenging ones will only realistically be implemented later. It may be better to provide a sub-set of SMART targets with water demand and water saving devices / technologies / building codes (amongst others) fully in place by 2030, whilst more challenging issues such as integrated surface water systems linked with aquifer recharge could be targeted for 2040 following a review of achieving SMART objectives.	→

Commitment 1: Safe Access to Water and Sanitation

Page	Key-word(s)	Commentary	Category
3	Minimum standards	In this context reference should rather be made to "**basic levels of service**" as opposed to "minimum standards". "Basic levels of service" are recognized in **Water Services Act**[1] and further described in the **Strategic Framework for Water Services** (DWS, Sept 2003)[2].	→
3	Sanitation, priority	The strategy correctly identifies **basic** sanitation in informal settlements as a **higher priority** where basic water services are already in place and sanitation backlogs exist.	✓

Commitment 2: Wise Use

Page	Key-word(s)	Commentary	Category
4	Water use (demand) & pre-drought norms	We disagree with the statement that customer's water use will not revert to near pre-drought norms given enough time. Whilst this is certainly not to be encouraged, the reality is that over time (likely 5 years +) and given favourable annual winter rains (during a possible cycle of 'wet' years), people will incrementally revert back to near pre-drought norms unless rising but fair block-tariff tariff pricing (which is subject to political interference & economic outlook) and prevention of water wastage is actively enforced on an annual basis and well communicated to customers. Refer to article by Mike Muller (June 2018)[3] with some thoughtful commentary on lessons to be learned in this regard. The CoCT should be mindful of too narrowly relying on successful WDM only.	✗
5	Pricing	It is recommended that a rising but fair block-tariff pricing structure be adopted in accordance with international best practice for water sensitive cities.	→
5	Pricing	The Strategy Paper does not mention clearly what checks and balances will be used to ensure pricing reflect customers' ability to pay nor does it clearly highlight who oversees the CoCT when setting new tariff structures. The role of DWS must be highlighted.	✗
5	Other incentives, By-laws	Experiences from the recent drought have shown that current by-laws are too rigid when alternative water sources / incentives (with due regard for H & S / cross-contamination) are being implemented. Amendment of by-laws and system of application approvals need to be addressed.	✓
5	Other incentives, private sector waste-water re-use	Although treated waste water re-use are mentioned (notably in table 1 as a committed municipal water project for 2023), it is disappointing that not more strategic incentives (with SMART targets) are listed for working with the private sector (commercial & industry) to make readily available raw or treated waste water at minimal cost at selected discrete locations. Thereby allowing further treatment (up to desired level) by the private sector, with resultant	✗

		saving on potable water usage. It must be recognised that not all industrial / commercial customers require potable water for all operations. This can also be a stimulant for further job opportunities as well as cost savings to the businesses which should stimulate economic growth.	
5	Active citizenship support	Imperative is to refresh and make available the customer charter. This should clearly highlight expected levels of service delivery (ex. min and max pressure range, flow rate etc.). Offering customers discounts on bills or minimal once-off annual payments should service levels not be met within stipulated timescales should also be considered as selectively done elsewhere in the world. This will improve accountability, transparency and reduce the run-of-the mill customer queries.	→

Commitment 3: Sufficient, Reliable Water

Page	Key-word(s)	Commentary	Category
7	timeously	Highlight in bold lettering for obvious reasons	→
7 & elsewhere	300 ML/d	Change to 347 ML/d (excl. WDM to ensure consistency with table 1 (page 14) or else explain the reason for variation. Apply throughout the document	→
7	Do Nothing	Agreed – this is not an option	✓
7	Do Nothing	The harmful cost implication estimate of a 'Do Nothing' approach is to be stated in the strategy paper. This is to reduce scope for political interference and highlight the risks. Important considerations are the economic impact (tourist economics were published for the recent drought) and the damage to infrastructure (resulting from intermittent water supply which associated cost estimate). One must also consider the Department of water and Sanitation's role in bulk	→

		water supply and if political interference is the obstacle, consider approaching the courts for relief.	
7	Approach – planning – production, demand, headroom	Not enough detail / strategy provided on annual production vs demand operational planning. At the onset of any given hydrological year, it is international WSP best practice to have in place a water supply ('production') plan setting out production targets for at least 2 scenarios; one being for a 'normal' (non-drought / average) year and one being for a 'drought' year. These monthly targets should be plotted / tabled against estimated monthly demand and then tracked against actual on a monthly basis. Deterioration against projected targets can act as triggers to indicate 'drought' or 'high demand' scenarios which in turn can trigger more water resources (like treatment process streams) to be brought on-line or new fast-track 'drought' schemes to be kick-started (recognizing that considerable preliminary works may need to be readied in time). The CoCT may wish to roll this out to all 4 current scenarios or the 2 most likely scenarios.	✘
9	Scenarios – key variables	Key external variables mentioned are water demand & climate change. The effects of urbanisation (population growth), national legislative changes and affordability of power supply should not be neglected. Has this been considered in scenario modelling?	→
9, 11	Scenarios –	To improve the public's understanding & overall transparency of scenario modelling and tracking it is recommended that a range of per capita demand (or overall demand) figures be allocated to each scenario. These can be superimposed on the plots. Similarly it is recommended that combined dam capacity levels (at onset of summer) be shown. The most probable scenario that will be used for setting tariff structures for the first 3 – 5 years should also be clearly indicated (with assumptions listed as appropriate)	→

Page	Key-word(s)	Commentary	Category
10	Lower Berg-River augmentation scheme	Why is the most recent status update only May 2016? Who should be held accountable for lack of more recent status update?	✗
12	New Water Programme, Base Case Plan, Water Use	The assumption is that there will be a moderate rebound of water use once restrictions are lifted. As stated earlier, we are concerned that a more severe rebound may take place, especially some time (likely 5 years +) the recent drought. Has sufficient stress testing and case-study research being done in this regard or is the CoCT confident that pricing and WDM will ensure demand does not exceed the Base Case Plan scenario?	✗
12	Earlier than needed – new supply schemes	Good approach due to uncertainty. Consider cost vs risk if advance timing frame reduced from 5 years to 3 years.	✓
15	Committed programme – desalination parks	The technical concept of 'desalination parks' need to be described in greater detail. Are these areas of land procured in advance with a phased building approach (desalination & network connectivity)? Does the City have enough electricity to serve these programmes?	→
15	Adaptable programme	Preparatory work should include advance procurement of sites, obtaining permits / licences and progressing network connectivity as far as reasonably financially viable.	→
17	Table 3 - restrictions	Restrictions – simplification in future is good. However, it is recommended that expected range of per capita demand restriction values be shown for each category as people will be interested to see. This also aids transparency and communication	→

Commitment 4: Shared Benefits from Regional Water Resources

Page	Key-word(s)	Commentary	Category

20	Risk - aquifers	Surely the risk of over-abstraction of Cape Flats groundwater aquifers must be considered? The risk of lowered water tables with associated risk of brackish (sea) water entering the aquifer resulting in higher treatment costs must be considered if not already assessed.	→
20	Risk - governance	Regional water management and governance is highlighted as a real risk. One would expect to see the strategy paper setting out a measurable approach in combatting this challenge. Active strategic steps should also include amongst others: • Active participation with DWS in the annual application of its sophisticated water modelling methods (based on the ARSP model from Canada – see article by Mr Mike Muller – ref 3) • Budgeting for people and resources to monitor flow in rivers and groundwater because of its importance in understanding climate change. This is especially important where these functions are no longer effectively maintained by DWS in view of budget challenges. Co-operative measures with National Government / DWS must be taken to address this issue.	✘

Commitment 5: A Water Sensitive City

No further comment; already addressed elsewhere

Translating the Strategy into Action

Page	Key-word(s)	Commentary	Category
24	Translating strategy into action	Effectiveness to include mentioning of good asset management practice. The CoCT should consider acquiring ISO 55001 Asset Management certification within the next 10 years.	→

24	People, vacancies, recruitment	Agreed – the current time-frame for filling vacancies is much too long (public consultation indicates 6 months or more) which is clearly undesirable.	✓
24	Improve cash collection (unpaid bills)	Consider bespoke in-house debt collection teams targeting viable cases as part of turn-around strategy.	→
27	Water re-use	The current level is indicated (i.e. 49 ML/d) of treated wastewater effluent. In-line with earlier commentary, more strategic targets should be set as soon as possible for selling / making available raw and treated waste water to industrial / commercial customers for private treatment and re-use (as appropriate) with beneficial spin-offs expected for potable water demand and economic job stimulation.	✗
	Asset Management	Water and Sanitation assets valued at R75 Billion and Operation budget at R7Billion. Not sure what the Ops would include as the Infrastructure R&M Norms and Standards has to be 8% of Asset value which is R6Billion. If R&M not included in the Ops budget of R7Billion, then this adjustment has to be made. Not sure where it will come from.	→

References used in this commentary

1. Water Services Act (Act no 108 of 1997)

2. Strategic Framework for Water Services (DWS, Sept 2003)

3. "Cape drought – The good, the bad and the ugly" – article in the Water & Sanitation Africa magazine (May / June 2018). Based on interviews held with Mike Muller (former DG of Water Affairs) and Dr Ronnie McKenzie (MD, WRP)

4. "Day Zero has not gone away" - article in the Water & Sanitation Africa magazine (May / June 2018). Prepared by Mike Muller (former DG of Water Affairs)